Purpose of the Study

The education of culturally diverse children has been one of the focuses of education since the early 1960's. One of the factors influencing education's inability to deal with the needs of culturally diverse children is the lack of teacher's foundational knowledge of language and linguistics as they relate to the education of those children.

The purpose of this study was to determine if "Linguistic Foundations and Cultural Diversity: An Instructional System" would produce a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills of students using the system. In order to know if that process of successful instruction had taken place, it was necessary to determine if the users of the system could recall, comprehend and apply the content provided.
Design of the Study

The investigations population consisted of approximately 650 students registered in a sophomore level teacher education program in the School of Education at Oregon State University during the 1973-1974 school year. The sample consisted of twenty-five control and seventy-five experimental group participants selected at random from the 270 students during the winter term.

The pre-test was administered at the beginning of the winter term to the control and experimental group. The pre-test consisted of thirty objective items testing the ability to recall, comprehend and apply knowledge of linguistic foundations and cultural diversity. The thirty items consisted of ten items at each of the knowledge, comprehension and application levels of cognitive domain defined by Bloom's Taxonomy of Educational Objectives. Handbook I: Cognitive Domain.

Two weeks prior to the end of the winter term the experimental group received the treatment, "Linguistic Foundations and Cultural Diversity: An Instructional System". At the end of the winter term both the control and experimental group was administered the post-test, consisting of the same items as the pre-test, but changing the order of presentation and order of possible responses.
Findings of the Study

The findings of the study are presented in terms of the two hypotheses tested.

$H_1$: There will be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to linguistic foundations and cultural diversity of those students using the Instructional System of Linguistics Foundations and Cultural Diversity as compared with the control group students not receiving the instructional system.

Hypothesis 1 was retained. There was a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to linguistic foundations and cultural diversity by the experimental group as compared to the control group.

$H_2$: Ninety percent of the students using the Instructional System of Linguistic Foundations and Cultural Diversity will complete cognitive evaluative test items as defined by Bloom's Taxonomy of Educational Objectives with Ninety percent accuracy.

Hypothesis 2 was rejected. Ninety percent of the experimental group did not complete the cognitive post-test items with ninety percent accuracy. However, eighty-eight percent achieved an eighty-seven percent or better level of accuracy.

Implications of the Study

1. Most potential teachers do not have a foundational knowledge of language, linguistics and their relationship to cultural diversity and education.
2. Most current teacher education curriculums do not provide foundational knowledge in linguistic foundations and cultural diversity to potential teachers.

3. Successful instruction of linguistic foundations and cultural diversity can be accomplished through the process of determining necessary content, and presenting that content through the combination of the instructional systems technique and the developmental method of Bloom's taxonomy.

4. "Linguistic Foundations and Cultural Diversity: An Instructional System" can serve as an effective input in the development of teacher education curriculum.

Recommendations for Further Study

1. Longitudinal studies are recommended that would investigate student's retention of outcomes and learnings after use of the instructional system and its effect on their further professional growth.

2. It is recommended that further studies investigate the affective development effected by the use of the system.

3. It is recommended that further studies investigate the instructional system's effectiveness in a field-based teacher education program in a multi-cultural setting.

4. It is recommended that this investigation be replicated with certified teachers teaching culturally diverse children.
Linguistic Foundations and Cultural Diversity for the Teacher Education Program at Oregon State University: An Instructional System

by

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A THESIS submitted to Oregon State University

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LINGUISTIC FOUNDATIONS AND CULTURAL DIVERSITY FOR THE TEACHER EDUCATION PROGRAM AT OREGON STATE UNIVERSITY: AN INSTRUCTIONAL SYSTEM

I. INTRODUCTION

Need for the Study

A dominant concern for our educational system in general and teacher education programs in specific has been the education of the culturally different children of this country. Since the early sixties, millions of dollars and a great deal of effort has been spent on federally funded compensatory programs and specifically designed programs in the public schools to alleviate the educational lag experienced by culturally diverse groups of children. The primary effort has been with the Black community.

Light (1969) states that while millions of dollars have been spent each year on programs aimed at improving the education of minority group children in our schools, most of the programs have been, and will continue to be, ineffective and the money wasted until the most crucial inadequacy has been recognized. Light illustrates this belief when he states that it is "the shocking lack of understanding of cultural and linguistic differences which is responsible for the failure of many of these programs to achieve their intended effect." (p. 9) He goes on to say, "The inadequate preparation of teachers and administrators to understand and serve the needs of students from different cultural and linguistic backgrounds can only be termed appalling." (p. 9) In order to alleviate the problem,
Light goes on to say that:

Teacher training institutions and inservice programs must provide courses in linguistics, cultural anthropology and methods of second language and second dialect teaching if teachers are to acquire the necessary understanding for working effectively with students whose language and culture differ from their own. (p. 9)

Postman and Weingartner (1967) make a point for the inclusion of linguistics in teacher education programs when they remind their readers that everything we do in education involves language and the student's educational success is most often measured on the basis of the skill of manipulation and use of a prescribed standard of English. The two authors state that, "language, of course, is a system of symbols, and it is language, both for its ability to represent ideas and to aid their development that largely accounts for the superiority of man over animals." (p. 133) The authors find an inconsistency between the need for knowledge and its commission when they state that, "what is curious is the fact that we look so seldom at the phenomenon of language whose role in the world of affairs have no parallel." (p. 133)

Dettering (1970) brings the problem nearer to a clear focus when he says, "the teacher often forgets that no approach to a symbol-based subject (which the school is comprised of) can be justified without assumptions and theories about the relation of language to thought." (p. 226) Postman and Weingartner concur with Dettering when they comment that:

It implies that in our attempts to communicate with one another almost everything is significant, and that the
The difficulty of communication appears to be a major factor in the problems being experienced in the education of culturally diverse students. It also seems that a better understanding of language and its importance in the communication process and the study of linguistics might be a valuable asset in the solution of many of the difficulties in providing a productive education for culturally different children.

Our society, as large and as diverse as it is, can survive only as a result of human cooperation on a greater scale than has been accomplished up to this time. As the primary mediating and communicative force between men, language has to be the prime factor in any cooperative endeavor. Looking at the growing complexity and unfortunate divisive trends in our society, it seems that one of the primary changes necessary for our educational system is to develop in students an improved ability to communicate, assuring a greater social cooperation necessary for continued existence.

Education is expansive; its problems difficult. Labov (1970) states that with relationship to the education of urban Black youth, teachers are faced with so many problems that they simply "do not know where to begin, and many now feel the need for some understanding of the language they are dealing with, if only to economize and concentrate their efforts" (p. 4).
Marckwardt (1966) carries Labov's statement one step further and suggests the direction that teacher education institutions and practicing teachers should pursue by saying that, "training in the black language patterns and adequate exercise in ways of expanding and manipulating them is the primary element in developing an articulate public." Marckwardt further states:

We must find out how to do this for speakers of sub-standard as well as standard English, for those who are at a cultural disadvantage as well as those who are culturally favored. The two approaches may have to be quite different, and we must make use of all the resources of linguistics to help devise the most effective teaching procedures" (p. 129).

In order to devise the effective teaching procedures Marckwardt speaks of, Abrahams and Troike (1972) contend that:

We must first learn the basic concepts of cultural and linguistic analysis, as we have learned that this is the most reliable means of opening the eyes and ears of teachers to the life-order by which their students live (p. 6).

Linguistic experts at Oregon State University concur with contemporary educational and linguistic research and literature in defining the concept areas necessary for a foundational preparation of teachers. The conceptual areas indicated are: (1) introduction to language and linguistics, (2) language acquisition, (3) language variation, change and relativity, (4) registers, school and non-school, and (5) bilingualism.

There is a good deal of written material available dealing with language and cultural diversity in the form of books, periodicals and papers. Many of these materials deal with one or more of the
conceptual areas previously discussed. However, in a review of literature and discussion with linguistic experts, no single publication or set of materials could be discovered that deals with all of the necessary concept areas in a manner useful to education students without a background in linguistics.

Most of the materials available for use in teacher preparation are either too specific, covering only one or two aspects of linguistics, or are technical, and therefore of little use to teachers in the field who literature shows to have had little or no linguistic preparation. This technical material is also of little use to potential teachers who have no foundational knowledge of linguistics and its relationship to cultural diversity.

This study has drawn from many separate sources to develop foundational content in linguistics and cultural diversity for teacher education because no single set of materials or publication could be found that provided the concepts necessary for foundational teacher preparation in linguistics and cultural diversity.

In this study the content areas comprising the foundations of linguistics as related to cultural diversity were constructed and presented in the form of an instructional system. Such a procedure was consistent with the competency or performance-based notion underlying the development of the teacher education program at Oregon State University. This method allowed for the systematic collection of interrelated and interacting instructional components to attain predetermined goals.
Other characteristics of an instructional system was that the process orders events in such a way that there was probability of accomplishing those objectives, was able to assess whether the objectives have been accomplished, and if they had not, refocus until the objectives were accomplished.

Contemporary books, materials and periodicals in the field are not designed to bring about a specified and measurable outcome, nor do they make the effectiveness with which they bring about intended outcomes continuously available. Thus, they are not adaptive or corrective.

Literature suggests an intimate relationship between language and what is done in education. Because of that important relationship, it appeared that the most advantageous time for presentation of foundational linguistic content may be at the beginning of a potential teachers' professional training. For the purposes of this study, the instructional system for Linguistic Foundations and Cultural Diversity was presented in the Theory and Practice II program of teacher education at Oregon State University.

The Theory and Practice II program was a two term, early experience program designed for sophomores wishing to explore the teaching profession. One term was spent in a field experience on a half-day, five day per week basis and one term in an on-campus, content-oriented experience. The Linguistic Foundations and Cultural Diversity Instructional System was presented during the content-oriented experience.
Purpose of the Study

The purpose of this investigation was to determine if an Instructional System in the Linguistic Foundations and Cultural Diversity designed for the Theory and Practice II program in the School of Education at Oregon State University would produce a significant change in the recall or recognition of knowledge and development of intellectual abilities and skills of students following the use of the system.

Hypotheses Tested

The investigation was designed to test the following hypotheses during the Winter Term 1974:

1. There will be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity of those students using the Instructional System of Linguistic Foundations and Cultural Diversity as compared with control group students not receiving the instructional system.

2. Ninety per cent of those students using the Instructional System of Linguistic Foundations and Cultural Diversity would complete cognitive evaluative test items as defined by Bloom's Taxonomy of Educational Objectives with ninety per cent accuracy.

Assumptions of the Study

The following assumptions were recognized in this investigation:

1. Knowledge of linguistic foundations and cultural diversity was important in the professional education of teachers.
2. Benjamin Bloom's Taxonomy of Educational Objectives, Handbook I: Cognitive Domain, provided a practical format for the systematic instruction and evaluation of linguistic foundations and cultural diversity.

3. An instructional system provided a logically developed and internally consistent methodology for presentation of foundational educational content, and continual evaluation of knowledge acquisition.

4. Although the cognitive, affective and psychomotor domains of human intellectual behavior are interwoven and overlapping, a student's behavior in the cognitive domain could be evaluated.

5. The evaluative tool used in this study measured what it proposed to measure, it was a valid evaluation of cognitive behavior as defined and developed by Bloom's Taxonomy of Educational Objectives.

6. The students involved in the study were a representative sample of students in the Theory and Practice II program of teacher education at Oregon State University

Definition of Terms

For the purposes of this study, terms were defined as follows:

Instructional System. Robinson (1972) suggests a system is a collection of interacting components which work in an integrated fashion to attain pre-determined purposes. Purpose determines the nature of the
process used, and the process implies what components will make up the system. The application of such a systematic strategy to the educational process is an instructional system. An instructional system is usually product-oriented. How accurately these products (in this case students' knowledge and intellectual abilities) reflect the system's purpose is the measure by which the system's operation is judged.

**Linguistic Foundations.** Concept area of linguistic study necessary for teachers as defined by linguistic experts at Oregon State University. The conceptual areas included were: (1) introduction to language and linguistics, (2) language acquisition, (3) language variation, change and relativity, (4) registers, school and non-school, and (4) bilingualism.

**Cultural Diversity.** A situation in which multiple life-ways of Americans exist who are linguistically and culturally different from mainstream middle-class America.

**Cognitive Domain.** Bloom (1956) defines the cognitive domain to include intellectual activities such as remembering and recalling knowledge, thinking, problem solving, creating, etc. The word taxonomy implies classes developed on a hierarchy. They are:
(1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, (6) evaluation. Each class includes the abilities of itself and those classes under it on the hierarchy (See Appendix A).

**Theory and Practice II Program.** A two-term learning experience in which students were assigned to a field experience for one term on a
half-day basis five days per week and one term in an on-campus, content-oriented experience. The program was developed to have five supervising-teaching-learning teams composed of a total of ten faculty members and approximately 250 students who have completed a minimum of forty credit hours of college work to begin the two quarter sequence each quarter. Each team was divided into five, two-faculty, fifty student teams that worked semi-independently, but as coordinated units of the larger teams.

Content of Theory and Practice II. Content was developed around the following areas: (1) cognitive development of children and youth, (2) affective development of children and youth, (3) school as a social system, (4) cultural diversity, (5) learning and instruction, and (6) changing classroom behavior, (7) career education, and (8) audio-visual materials.

Field Experience of Theory and Practice II. Students spent one term of half-day experience five days per week in the public schools working with teachers and students in teaching, observing and tutoring under the supervision of a university staff member. An attempt was made to associate theory and practice.

Validation Committee. A committee of three university staff members comprised of one linguistics expert from the Department of Anthropology and two members from the faculty of the School of Education whose job it was to evaluate the pre- and post-test materials to assure the fact that questions were representative of those appropriate to the cognitive domain in general and the class of the hierarchy they
purpose to be specifically as defined by Bloom's Taxonomy of Educational Objectives.

Development of Intellectual Skills and Abilities. The development of student's ability to comprehend or know an abstraction well enough to correctly demonstrate its use and to be able to apply that knowledge and comprehension appropriately.

Summary

Recent writings in education have focused upon the need for increased emphasis on the study of language and linguistics in teacher education programs, particularly with relationship to the education of culturally different students.

Light, Postman, Weingartner, Labov, Dettering, Marckwardt, Abrahams and Troike exemplify efforts of educators and linguists to publicize this need. For the past decade much money and effort has been spent in efforts to improve the education provided culturally different students. Research and social reality along with expert's opinions would indicate that those efforts have not met with a great deal of success. On the basis of the information available, it appeared necessary to develop an instructional system in the foundations of linguistics and cultural diversity. The purpose of this investigation, therefore, was to evaluate the effectiveness of that instructional system when used by potential teachers.
II. REVIEW OF RELATED LITERATURE

The purpose of this chapter was to review the literature and research related to: (1) the need for, and use of a knowledge of linguistics in public education, particularly as it relates to the education of culturally different children, (2) linguistics in teacher education programs, (3) written materials in linguistics and cultural diversity available for teacher education, (4) instructional systems, (5) competency-based, performance-based and cognitively-based approaches to teacher education, and (6) Bloom's Taxonomy of Educational Objectives: Cognitive Domain.

This chapter was organized to include viewpoints of authorities and reviews of appropriate research in a cohesive, expeditious manner.

Need for Linguistics in Education

As indicated in Chapter I, we have been grappling with the problems of educating culturally different children with no great amount of success as far back as the early 1960's. Writers in the literature place a good deal of the fault of that failure on the lack of a knowledge of linguistic and cultural differences and point to a necessity for inclusion of the study of linguistics and cultural anthropology in teacher education programs in order to mediate the difficulties in the future. Writers point out the fact that no approach to education can be justified without assumptions and theories first being considered about the relation of language to thought. Whorf (1942), in Carroll (1956), elaborates that contention when he writes:
The fact that we talk almost effortlessly, unaware of the exceedingly complex mechanism we are using, creates an illusion. We think we know how it is done, that there is no mystery; we have all the answers. Alas, what wrong answers! It is like the way a man's uncorrected sense impressions give him a picture of the universe that is simple, sensible, and satisfying, but very wide of the truth. (p. 250)

Whorf (1940), in Carroll (1956), says that when linguists were able to examine critically and scientifically a larger number of languages of different patterns, their base of reference was expanded. Whorf states:

It was found that the background linguistic system (in other words, the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shape of ideas, the program and guide for the individual's mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade. Formulation of ideas is not an independent process, strictly rational in the old sense, but is part of a particular grammar, and differs, from slightly to greatly between grammars. (p. 212)

Labov (1970) also considers the grammars of diverse groups when he views the importance of such consideration for the teachers of speakers of nonstandard English. Labov views the consideration as follows:

It is important for the teacher to understand the relation between standard and nonstandard and to recognize that nonstandard English is a system of rules, different from the standard but not necessarily inferior as a means of communication. All of the teacher's social instincts, past training, and even faith in his own educational lead him to believe that other dialects of English are merely "mistakes" without any rhyme or rationale.

In this connection, it will be helpful to examine some of the most general grammatical differences between English dialects spoken in the United
States. One could list a very large number of "mistakes", but when they are examined systematically the great majority appear to be examples of a small number of differences in the rules. (p. 14)

Spolsky (1969) discusses the importance of teachers making the type of analysis Labov speaks of when he writes:

... there must be consistency between the theory of language and the theory of learning if the outcome of teaching is to be successful. Indeed, one must go further: a valid theory of learning must include a theory of language learning, and a theory of language must face the problem of how language is learned. (p. 146)

Dettering (1970) extrapolates further on Labov and Spolsky when he carries the discussion to evaluation of students in the schools. In attempting to measure mental aptitudes and raise academic achievement, the teacher works mainly with symbolic stimuli and responses. This brings Dettering to state:

To rationalize such practice the educator must assume, (a) that thought and language are identical or at least mutually dependent and inseparable parts of one continuous process; or (b) that if separate, thought and language are so closely correlated that a modification of one is almost always followed by a modification of the other. (p. 276)

Hertzler (1965) also sees a cause and effect relationship dealing with language that a teacher needs to be cognizant of in the education of children with diversive linguistic backgrounds. Hertzler contends:

Our main concern, as noted, is with the sociological aspects of language - language as both cause and effect of social situations and actions. This would seem to focus attention exclusively upon social functions. However, it is important in this study also to have some knowledge of the more general functions
of language because these are fundamentally related to most cultural, social-psychological and societal functions. Without such knowledge we lack orientation for the study of many of the sociologically important features, functions and dysfunctions of language. (p. 38)

As has been discussed, verbal stimulus and communication is the medium of education. Labov (1970) underscored the importance of understanding and communication between student and teacher earlier in Chapter I and previously in this chapter. Hertzler (1965) views this communication of particular importance when she says:

To "know" a person is to know how he thinks and how he interprets himself, his group and his world in his particular societal and cultural context; this, as we have seen, is revealed in and determined and limited by his language. Even intonations and emotional overtones, as well as specific connotations, have high pertinence as he reacts with his fellows. These facts obviously are very important in his contacts with members of other ethnic groups, with regional and national groups that speak a different language. Because of linguistic diversity and the correlative metaphysical diversity, there are vast possibilities not only of misunderstanding, but of complete lack of communication. (p. 126)

Marckwardt (1966) points to the method of circumventing such a lack of communication when he states the following:

Our starting point is an understanding of language, of its structure and operation. The recognition that every language has a system, that the system can be described in understandable terms, combined with the realization that somehow every child is capable of learning his mother tongue and does learn it, will go far toward overcoming stigmas so firmly embedded in our national consciousness. (p. 131)

Extending Marckwardt's contention a step beyond the statement that it is important to realize that every child can and does learn his mother tongue, Hopper (1970) says:
Psycholinguistics research has long known that most of grammar has already been learned by the child before he enters school. The present research adds to this a hunch that development just prior to entering kindergarten is focusing upon learning to apply linguistic knowledge appropriate to situations.

Educational practices could be most supportive of this aspect of development if less emphasis were placed upon forcing children to speak sentences in a certain grammatical form (when certain approved structures of grammar are properly executed), and greater emphasis placed upon educating the children to use their language to perform certain functions (such as defining or changing certain aspects of their world, referring, abstracting from sets of facts, meta-communicating, making poetry, etc.). (p. 6)

Burling (1970) speaks to the importance of considering the fact that children learn language so young when he writes that, "the central fact that human language is learned so early and is central to so much of our other learning, makes it tempting to wonder if our ability to learn language does not somehow lie at the core of our other human abilities." (p. 200)

When considering the difficulties teachers experience in the education of linguistically and culturally diverse students, McDavid (1970) contends:

Much of the problem of developing a language program for the schools grows out of a widespread acceptance of the assumption that there is a standard variety of the language which for various reasons has become a model of usage. Unfortunately, however, this assumption is not always based on an examination of the facts of usage; indeed, many of those who discuss the need for a standard do not understand the rationale from which standard languages have developed, consciously and otherwise. (p. 85)
Labov (1969) is more specific when he discusses the lack of understanding shown when the concept of a standard of language is considered. Labov states:

The notion of 'verbal deprivation' is a part of the modern mythology of educational psychology, typical of the unfounded notions which tend to expand rapidly in our educational system. In past decades linguists have been as guilty as others in promoting such intellectual fashions at the expense of both teachers and children. But the myth of verbal deprivation is particularly dangerous, because it diverts attention from real defects of our educational system to imaginary defects of the children; and as we shall see, it leads its sponsors inevitably to the hypothesis of the genetic inferiority of Negro children which it was originally designed to avoid. (p. 2)

Garcia (1970) would appear to agree with Labov that there are dangers to be dealt with if education continues to view the child as the problem. Garcia (1970) says:

... if the student is culturally different and lacks the experiential background which the school accepts and which is a prerequisite for success, the student is seen as having the problem. An important change that must take place is that the teacher must see the needs of these learners as her problem. And then proceed to modify her behavior and attitudes to assure successes of her pupils. (p. 3)

McDavid (1970) further makes the emphatic statement:

... what is important is that the schools get rid of the notion that a home dialect-regional or social is something loathsome, from which the children must be purged, so that a new kind of speech (and writing) may be imposed upon them. Psychologists as well as linguists have taught us better; we no more have to destroy the home idiom to teach the standard one (itself with many varieties) than we have to forbid playing football to those who are trying to learn tennis. The end, in the long run, is greater fluency, facility, and versatility; our world is not homogeneous, and no student should be expected to use a single kind of discourse in coping with all kinds of problems.
In this sense, language education is the work of a lifetime; we should at least hope that those who direct the language programs in the schools should not inhibit students from exploiting the resources of the language. (p. 107)

Light (1972) pursues the question of teachers attitudes about their student's language and the possible effect of those attitudes when he asserts:

Studies have shown that teacher attitudes toward their students have very powerful impacts upon educational achievement, and the changing of teacher attitudes and expectations regarding minority children has been called 'the number one imperative in urban education.' Yet influential educators continue to perpetuate unsubstantial views concerning the nature of the language of minority children which can be expected to adversely influence the attitudes of teachers toward their students. It has been reported, for example, that the speech of poor children 'seems to consist not of distinct words, as does the speech of middle class children of the same ages, (but rather of) phrases or sentences that function like giant words (and that such children) at four years of age hardly speak at all.' This continues in spite of the fact that such views have been carefully refuted by scholars studying social dialects. (p. 12)

Labov (1969) speaks to the same point, but uses as his example a contemporary educational theory which has received much consideration in the educational enterprise during recent years. Labov contends:

It is widely recognized that the teacher's attitude toward the child is an important factor in his success or failure. The work of Rosenthal of 'self-fulfilling prophecies' shows that the progress of children in the early grades can be dramatically affected by a single random labelling of certain children as 'intellectual bloomers'. (Rosenthal & Jacobson, 1968) When the everyday language of Negro children is stigmatized as 'not a language at all' and 'not possessing the means for logical
thought', the effect of such a labelling is repeated many times during each day of the school year. Every time that a child uses a form of NNE without the copula or with negative concord, he will be labelling himself for the teacher's benefit as 'illogical', as a 'nonceptual thinker'. (p. 26-27)

Labov (1970) further discusses the types of linguistic study of nonstandard language of cultural different children, and the payoff of that study thus far when he writes the following:

At present, we have only two kinds of studies of nonstandard dialects: those carried out by linguists outside the school, and those carried out by psychologists and educational researchers within the school. The teaching process itself has not yet been observed through the lenses provided by systematic sociolinguistic analysis. The information gathered by educators, no matter how useful it may be, has one major defect: it shows us only the results of the interaction of underlying systems, without showing us the systems themselves. The data on number of errors do not allow us to distinguish, as a rule, between rare or variable behavior and regular rule-governed behavior. We cannot connect the linguistic system of the students with their actual performance in class. Furthermore, much of this research does not evaluate the social factors which are controlling behavior in the test situation, and so there is always one major uncontrolled factor: we cannot distinguish the student's effort or attention to the task from his ability to perform it. Objective tests applied to large bodies of students are therefore of limited value at the moment in solving the problem of educational failure; we need direct observation of the teaching process, of what happens when a teacher with sociolinguistic system A comes into contact with a student who has system B. Before we can make such observations, we must know as much as possible about the particular students - especially whether they are members of the major peer groups of the community, using the nonstandard vernacular in its most systematic form, or whether they are semi-isolated individuals. As for the teacher, we must know how much he knows about the students' language, and what his own range of available dialects is. In the absence of such direct studies, we must draw upon indirect evidence to see how sociolinguistic research applies to educational problems. (p. 42)
Leaverton (1971) contends that the following is the cost of a lack of consideration of the interaction difficulty between teachers and the nonstandard speaking child:

The traditional approaches to reading and oral language programs frequently have not taken into account the effect of the nonstandard dialect on the interaction between teacher and child possibly to a large extent has contributed to the difficulty many of the children have had in learning to read and achieve ultimate success in the school situation. (p. 10)

Light (1972) provides a governmental perspective of the need for a different educational perspective and backs the contention up with statistics when he writes:

... the head of the bureau in the U. S. Office of Education responsible for federally supported teacher training programs has noted that education in this country needs to move from a single culture, white, western, with a primarily Protestant view of past and present, to a multicultural view of education, and that this won't be done until we get administrators and teachers and support personnel in our schools who themselves have a multi-cultural point of view.

One study which raises such doubts is concerned with the preparation of teachers of English as a second language, that is, those who are entrusted with the teaching of English to Mexican-American, Puerto Rican, American Indian, and other minority group children in our nation. It reveals that such teachers are almost totally unprepared for their work, indicating that of the elementary and secondary school teachers sampled:

91% had no practice teaching in ESL. (English as a Second Language)
85% had no formal study in methods of teaching ESL.
80% had no formal training in English syntax.
65% had no training in general linguistics. (p. 10-11)
Light (1972) finalizes his contentions when he summarizes:

Yet the attitudes of educators will not change without an understanding of the backgrounds of these children, and such understanding cannot take place without study of other languages, other dialects, and other cultures.

Read together, these statements and studies constitute a convincing argument for the view that the schools have failed minority group children, that a major cause of this has been a failure to understand the linguistic and cultural backgrounds of such children, and that there must be increased attention given to training educational personnel to bring about this understanding, if education for minority children is to improve. In the past, a small number of such persons have been trained for work in bilingual education projects, in English as a second language, social dialectology, reading and other areas of the language arts. (p. 13)

Lefevre (1965) provides a summary of assumptions of linguistics important to the instruction of culturally diverse students when he lists:

Substantive and Methodological Assumptions of Linguistics

Two basic substantive assumptions are as follows:

1. Language is culturally determined human behavior.
2. Every language has an independent and unique structure; this structure requires an independent and unique description.
   a. The structure or system itself, taken as a whole, is the operational grammar of the language as used by native speakers.
   b. The analysis of the system gives the descriptive or structural grammar of the language, in a broad sense, its 'rules.'

Four basic methodological assumptions are as follows:

1. Every language may be studied objectively and systematically.
2. Such study of a language yields an accurate, comprehensive, orderly description of its structure.
3. Linguistics is a new way of analyzing language, sorting data, classifying findings. Thus, it is not simply another nomenclature for the parts of speech of traditional and school grammars, nor another way of parsing and diagramming.

4. Linguistics produces new data, new knowledge, new insights, new understandings, and new interpretations of what it produces. (p. 142)

Need for Linguistics in Teacher Education

Again, in the interest of clarity and cohesion, the literature available and pertinent to the need for linguistics in teacher education is presented in an order of, (1) philosophical premises, (2) necessary content, and (3) methodology of instruction.

Fraser (1970) in a paper entitled, "Linguistics and the Teaching of English as a Foreign Language Teacher," presents justification for linguistic training for potential teachers when he says:

The teacher who is aware of the language does not have to evade questions by referring the student to the teaching materials - which may be less than lucid on the point - or utter a resigned 'that's just the way it is.' He's able to call upon this knowledge in specific cases, whether it is teaching a particular structure, clarifying the difference between the use of two very similar words, or suggesting exercises to improve less-than-native pronunciation. (p. 1)

Goodman (1971) concurs with Fraser's analysis when he notes that "Bringing these linguistic, sociological, psychological, pedagogical factors together teachers can summarily dismiss forcible intervention in the language of learners." (p. 94) Goodman concludes his argument with:
To achieve this goal we need schools and teachers who accept and understand language difference, who are able to encourage children to continue to use the language they bring to school in learning, who provide stimulating relevant learning environments for their pupils, who exemplify themselves rich, varied and appropriate language use rather than up-tight proper language. If we succeed, we will find our pupils opening outward and ever expanding on the base of their linguistic competence. If we do not we will hear them openly shouting or quietly muttering, "F'get you, honky, F'get you oreo!" (p. 95)

Light (1972) contends that we have not achieved our goals and attributes some of the fault when he states:

... the present state of affairs in the schools can be attributed in large measure to teacher preparation institutions which lack realistic curriculums for language arts teachers who will work with minority children, and which have failed to produce educators sensitive to the cultural and linguistic characteristics of such children. (p. 14)

In the way of teacher education Light (1972) says:

It would seem that those who work with or train others to work with children whose first dialect or language is other than standard English should have at the minimum:

. information concerning what we know of the nature of language and how it is learned, including an understanding that by the time they enter school all normal children regardless of cultural backgrounds control the phonology and grammar of at least one language, and if this happens to be a language or dialect other than standard English it is not an indication of some mental or physical aberration on the part of the child.

. an understanding that language variations arise through social and cultural forces, through interactions with people who use these forms and not through such things as 'lazy tongues' or 'stupidity.' It is particularly important that this understanding be communicated to the teachers who themselves have arisen from working or lower-class backgrounds
and who are too often the most rigid and intolerant toward non-standard English or even toward teaching through a language other than English in bilingual education programs.

- a realization that a first language or dialect other than standard English interferes seriously with performance in applications of such language skills as reading and writing - and with ultimate performance in subject matter areas.

- an awareness that any new mode of speech should be taught as a supplementary mode rather than as a replacive one. The child is ultimately the one to decide which mode to use on what occasion.

- an understanding that language features which are systematic to be emphasized in any language arts program rather than those which are incidental items, that attention should be directed to those systematic features of a nonstandard dialect that are diagnostic socially, and that each non-English group has, in addition, its own systematic problems.

- an understanding that situational factors strongly influence and may inhibit speech, and that the so-called 'non-verbal' child has yet to be discovered, given adequate control for situational variables. (p. 14-15)

A study by Makely (1969) supports the philosophical premises set by Frazer, Goodman and Light. In a research study that compared the teaching practices of teachers with and without preparation in linguistics, Makely (1969) summarizes:

The greatest significance of the Study as a whole seems to lie in the consistently higher feeling of competence exhibited by those Roosevelt University graduates who had taken a course in linguistics as undergraduates. The correlation between their having taken the course, their ability to make more informed choices in evaluating various approaches to a language teaching problem, and their feeling of competence emphasized the value to a teacher of being familiar with several grammars -
several alternate ways of dissecting and explaining the workings of language. Furthermore, this feeling of competence extends beyond the area of grammar to the teaching of writing, and to the teaching of the English language in all its aspects. (p. 15)

In the Fall of 1970 a program was initiated to marry the findings of researchers and the needs of teachers. This program, conducted by the Language Research Foundation of Cambridge, Massachusetts was to develop a curriculum for training teachers in cross-cultural communication based on the existing body of linguistic and sociolinguistic research and supplemented by primary research in areas where no work had been done. Roberts (1971) reports the final curricular emphasis agreed upon when she writes:

The basic principle of the Language Research Foundation project is that communication itself is more important than communication in standard English. The goal is to work towards an understanding and acceptance of this principle by teachers.

At the onset of the program four areas of focus for the curriculum were delineated: teacher attitudes; linguistic aspects of language differences; sociolinguistic aspects of language differences; and tools for more effective classroom interaction. The program is designed to: 1) bring teachers to an awareness of their attitudes towards culturally different students and the impact of these attitudes on learning/teaching; 2) teach teachers about specific kinds of linguistic differences, the systematically and variability of dialects; 3) teach teachers about different sociolinguistic codes, style ranges and style shifting; 4) give teachers tools for maximizing communication effectiveness in the classroom. (p. 3)
Garcia (1972) discusses the steps a teacher needs to take before he can intelligently deal with the pros and cons of teaching the rules of Standard English grammar to speakers of Black English when she lists:

1. They should become fully aware of what grammars are.
2. They should know the developmental sequence in natural language learning.
3. They should attempt to determine the amount and type of linguistic knowledge each child has when he enters the class.
4. They must know the grammar, and in particular the phonology and lexicon of BE.
5. Finally, they should become aware of the culture, values, and attitudes of the students, who their linguistic models are, and how they as teachers can help the child to develop and broaden his linguistic skills. (p. 5)

Robinett (1969) presents the content necessary for a linguistics course to be relevant to a potential teacher of English as a second dialect when she offers:

The course entitled Introduction to Linguistics should include general information about such things as system in language; what constitutes phonological, morphological, and syntactical descriptions; the relationship between language and meaning; linguistic change. At the end of such a course, students be expected to have a relatively sophisticated attitude toward language and its operation. (p. 123)

Ohannessian (1967) has made some pertinent statements regarding teacher education for teachers of English as a second dialect, including:

It seems to me, therefore, necessary to give the trainee not only competence in linguistics but an understanding of the psychological, pedagogical, and perhaps cultural and sociological factors that may enter into the making of instructional materials suitable to the age, level, aims, and needs of the learner. (p. 6)
Michel (1972) engaged in a study to find the necessary elements of a program for the preparation of teachers for Bilingual Education, after sending questionnaires to 425 individuals involved in bilingual education with 412 responding. The participants were to respond (1) agree, (2) disagree, or (3) abstain to the necessity of inclusion of particular contents in a preparation program. Under the larger area of training in linguistics, Michel found:

Practical Linguistics. Practical training in hearing and analyzing the speech of the child in English and Spanish. (1) agree 87%, (2) disagree 5%, (3) abstain 8%.

Contrastive Linguistics. Comparison of the structures of English and Spanish. Contrasts in pronunciation, grammar, vocabulary. (1) agree 85%, (2) disagree 6%, (3) abstain 9%.


In a report on linguistics and the training of teachers of the disadvantaged, Adams (1969) stated in his summary:

The recommendations made in this section are based on two assumptions. The first and overriding one is that when action can be taken to alleviate under-privilege, it should be taken. The second is that teachers should be trained professionally, as professionals, to be professional.

Adams (1969) goes on to say:

There are also two, second-order assumptions that ought to be stated as well. First, given the utility of Standard American English as a means of educational, social and economic advancement, all children should achieve proficiency in its use. Second, such proficiency should not be
accomplished at the expense of the child's personal integrity or his social or ethnic identity. (p. 235)

Adams optimistically states, "Given these assumptions, the question to be addressed now is: what training should a teacher have in order to be able to deal with the language and communication education of underprivileged children." (p. 235) Adams then proceeds to explore the training necessary for a teacher to deal with these children's education when he notes:

A more directly practical answer to the question, however, can only follow after the parameters of the training problem have been stated more fully. The full problem involves the trainee; as a language user, as the receptical of certain educational and social preconceptions, as a social analyst, as a language analyst, as a teacher of language, and as a teacher in the broadest sense of the word. (p. 235)

Shuy (1970) ran an exhaustive study of the 2,500 colleges and universities to explore what sociolinguistic theory, materials and training programs were in existence relating to the education of culturally diverse groups. Shuy found that:

Seven universities with no degree program in that area of urban dialects offer two or more courses devoted wholly or largely to the language of the disadvantaged. These schools are listed here, with the appropriate department or program and the number of courses offered dealing in large part with sociolinguistics and urban dialects.

University of Chicago; English/Education, 5
Illinois Institute of Technology, Chicago; Center for American English. 3
East Texas State University, Commerce; English, 3
State University of New York, Stony Brook; Linguistics, 3
West Chester State College, West Chester, Pa.; English, 2
Texas A&M University, College Station; English, 2
Harvard Graduate School of Education, Cambridge; Education, 2 (p. 183)
Shuy's evidence shows that six schools reported courses in "Language and Culture" or "Language and Society" which dealt with the urban language question. Additionally, Shuy's study showed that six schools reported "Education" courses which included a unit on urban dialect. Although the number was found to be small, the diversity of content ran from "Language and School Programs" to "Methods of Teaching Slow-Learning Children."

Perhaps more indicative of all Shuy's (1970) findings is the following summation:

The majority of schools responding affirmatively to the survey fall into a third category indicating that the offerings in sociolinguistics/urban dialect are indeed small in number and not very substantial in scope. In summation, the current picture for training teachers and researchers to deal with sociolinguistic/urban language problems is not a bright one: only nine schools in the country offer degree programs in sociolinguistics and of these only three offer the Ph.D.; very few other schools (seven) offer even two courses in the field; of the approximately 2,500 colleges and universities in the U.S. there are no more than 75 which deal with urban language as a small unit of an English language/dialectology/language and culture course; the number of pertinent courses available to future elementary school teachers is pitifully small, and of those offered, none are adequate to the needs. While the survey techniques were admittedly limited (broad population, no follow-up) and therefore the statistics may be rough, observations of those from different disciplines currently working in the field of urban language corroborate the overall picture. (p. 190)

From the survey Shuy (1970) made the following generalizations:

1. There are few college/university offerings which deal substantially with the urban language/social dialects/Black English phenomenon.
2. There is great confusion as to what Black English/Urban Language/Urban Dialects/Sociolinguistics
3. There is little interdisciplinary cooperation on individual campuses.
4. There is still no clear direction for the development of a program to train either researchers or teachers in the field of sociolinguistics/urban language/social dialects/Black English. (p. 197-8)

As a method of dealing with the glaring inadequacies Shuy seems to have uncovered in the area of educating culturally different children, Kanada (1972) offers the following suggestion for a systematic approach to teacher instruction in linguistics. Kanada states:

Linguistic findings will tell us the structures and interrelationships of structures in language. But the structures and rules do not teach. Psychological findings will show us to some extent how and when learning takes place. But they do not teach either. What we need is an integrated system of whom to teach, what to teach and learn for. This is justified as follows: Any educational enterprise, if it be educational at all, is a process of bringing about change to the learner according to some definite intention. Education is formal learning distinctly separated from informal learning which occurs with no intention, either on the part of the learner nor on the part of the environment. What we are concerned with is not the latter but the former kind of learning. Then the very first and crucial question we have to give an answer, although it may be tentative, is what we expect of the learner after he has gone through a course of instruction. (p. 4)

Written Materials in Linguistics and Cultural Diversity
Available for Teacher Education

As indicated in Chapter I, there is a good deal of written material in the form of books, periodicals and papers in the field of linguistics and cultural diversity. However, no single book, set of materials, periodicals or papers could be discovered that offered the content necessary to provide foundational linguistic and cultural
diversity content for teacher education.

This portion of the review of literature provides a sample of contemporary written materials available. The materials to be sampled are, 1) books, 2) periodicals and journals, 3) papers. In each case, the review will include the emphasis of the publication and its technical level.

Robinett and Benjamin (1970) developed a program in book form which stresses early childhood curriculum as well as standard language skills. The Michigan Oral Language Series (English as a Second Dialect) is a series of dull sessions and short learning experiences such as language games, play activities, songs and stories which could fit into an elementary curriculum. The content is not foundational, but relies in the assumption that the user has a relatively technical background in linguistics. Specific situations are stressed rather than a broader sociological or sociolinguistic perspective.

Gumperz and Hymes (1972) have co-authored a book of research readings entitled Directions In Sociolinguistics: The Ethnography of Communication. The book is developed around three conceptual areas: "Ethnographic Description and Explanation," "Discovering Structure in Speech," and "Genesis, Maintenance, and Change of Linguistic Codes." The areas appear to include general foundational content, but include a substantial amount of technical information.

Wilkins (1972) covers linguistics and language teaching from a broad perspective. Much of the content is fitted more to specialized
linguistic training than linguistic foundations and cultural diversity.

Bartley and Politzer (1972) have developed a practice-centered teacher training program for instruction of standard English to speakers of nonstandard dialects. While perhaps useful in an undergraduate teacher education program, the book assumes considerable experience with the education of culturally diverse students.

Shane (1967) has written a book entitled Linguistics and The Classroom Teacher, which covers a wide spectrum of content. The most appropriate aspects for foundational linguistic content include: "introduction to language," and "emerging changes in the classroom." The historical perspective of linguistics and a review of research and publications is treated thoroughly while being technical in nature and not directly related to cultural diversity.

Postman together with Damon, Morine and Morine has developed a set of six textbooks for teacher education including: The Uses of Language (1965), The Languages of Discovery (1965a), Language and Systems (1965b), Exploring Your Language (1966), Language and Reality (1966a) and Discovering Your Language (1967a). The texts are intended to be used individually by the education student, supplemented by a correlary instructor's text. The six texts would take about one year for completion. Of the six texts, Language and Reality, Discovering Your Language and The Uses of Language are most closely related to the content literature suggests should be included in a linguistic foundations and cultural diversity program.
The above mentioned books, together with those referred to earlier in the review of Linguistics in Education and Linguistics in Teacher Education along with those drawn from the instructional system provide a sample of books available for use in the provision of content in linguistic foundations and cultural diversity in teacher education.

Periodicals and journals provide a great deal of current information useful to teacher education. While useful, the information provided in periodicals and journals is not presented in an instructional manner. Instead, the articles included present isolated concepts and information. The following is a sample of the information provided in periodicals.

Ausubel (1964) discusses the question of how reversible are the cognitive and motivational effects of cultural deprivation? The publication deals primarily with "critical periods" in child development and language as both a symptom and a factor of cognitive development.

Baratz (1969) reviews linguistic and cultural factors in teaching reading to ghetto children. Baratz discusses the language difficulties which interfere with the disadvantaged Negro child's ability to learn to read standard English, and a system using Negro dialect in beginning reading for such children is proposed.

Berstein (1964) discusses the theoretical perspective of "restricted" and "elaborated" codes. Language and speech are explored, one being defined as the totality of options for expression, whereas
the second reflects the option's taken under actual circumstances. Within this context, the social class uses of the two codes are examined as well as educational consequences.

Blank and Soloman (1969) provide examples of dialogue between a teacher and a four-year-old black child in a one-to-one tutorial language program in a discussion of how "disadvantaged" children should be taught.

Bromwich (1968) offers three approaches to the teaching of verbal skills to black children. Two approaches are rejected, and instead, an approach in which the child is encouraged to verbalize in an atmosphere in which his attempts to communicate are valued, is encouraged.

Cazden (1966) gives a look at subcultural differences in child language. The publication includes three main topics: a description of nonstandard English and an assessment of its possible deficiencies, viewing language in terms of a developmental continuum, and consideration of the different functions fulfilled by language usage.

Davis (1968) wrote a description of the existing studies in dialect research which aim for more efficient teaching methods to meet the needs of schools and children.

Dillard (1967) shares descriptions of the background, development, and implications of Negro dialect, with an outline of school programs including "English as a Second Language."

Erickson (1969) published a review of a research project indicating that the language used by black speakers was adequate for
communication of abstractions when the researcher shared the context of the speaker. Erickson suggests that allowing the use of the black dialect in the classroom would result in a high context and thus more productive communication situation for the black child.

Gladney (1968) proposes a model for teaching standard English to nonstandard English speakers which includes the recognition of the functional distinction between "school talk" and "every day talk" in an educational environment.

John and Goldstein (1964) team up to present the hypothesis that the dynamics of language acquisition can be seen in the terms of two variables: (1) the stability of experiencing word-referent relationships, and (2) frequency and type of verbal interaction during language acquisition. More specifically, the amount of corrective feedback the child receives while learning a new label.

Loban (1968) presents a program devised to teach standard English to children who speak social class dialects in through the use of examples of teacher-student dialogue in publication entitled "Teaching Children Who Speak Social Class Dialects."

McDavid (1968) provides a brief historical survey of dialect differences along with specific examples of present day linguistic variations in American English.

Radin (1968) discusses factors which interfere with the disadvantaged child's progress in school. Implications for solutions of the problems are given as language, economics, race and culture.

Rosenthal and Jacobson (1968) describe the effect of teacher's expectations on children's school performance. Information was drawn
from several studies involving both middle-class and culturable
diverse students.

Wood and Curry (1969) write that interview and observation con-
ditions (instructions to use "school talk" or "home talk") and social
status influence stylistic variations and various grammatical chara-
ccteristics of black girls. Implications for the classroom are also
discussed.

The final area of the review of written materials available to
a linguistic foundations and cultural diversity component of a teacher
education program is that of papers in the field. Again, the papers
provide informational content and concepts, but are not instructional
in nature. The following is a sample of papers available.

DiPietro (1970) discusses and compared bidialectalism and
various types of bilingualism, and the educational considerations pre-
sented by each. Both phenomena seem to be marked with some strife or
social tension.

Jakabvits (1970) describes an "Encounter-Communication-Workshop"
in an unpublished report. The paper outlines a program of in-service
training for teachers and administrative personnel designed to foster
a better understanding of the problems involved in the education of
children from minority groups within an educational system that is
defined and administered by the cultural interests of the dominant
social community. Language and education is an important aspect of
the material discussed.
Levinsky (1972) provides a discussion of bilingualism and second language learning including many linguistic considerations that figure in the problem of language learning. Included are also observations of bilingual classrooms.

The Chicago Public Schools (1972) developed a document entitled "De Todo Un Poco" which seeks to underline the importance of cultural awareness by providing examples of the folkways, language, customs, art, traditions and life styles of different ethnic groups. Bilingual and bicultural education receive particular emphasis.

Burt (1971) wrote a humorous sounding paper entitled "Goof Analysis in English as a Second Language" intended to help teachers decide what grammar to be taught by noticing and recording common errors (goofs) made by their students in second language instruction. Burt contends that a hierarchy of goofs can be established by taking sentences with numerous errors and determining which error, when corrected, does the most to make the sentence understandable.

Leaverton (1971a) describes an experiment investigating two basic questions concerning reading instruction to speakers of non-standard dialects. The use of "every day talk" and "school talk" or registers in teaching is central in this investigation.

Instructional Systems

This portion of the review of literature deals with instructional systems in teacher education programs. The pertinent aspects covered are, (1) definition of systematic approach to instruction, (2) instructional systems design, (3) systematic instruction in Competency-based
Teacher Education programs, (4) methodology of instructional systems, (5) evaluation of instructional systems.

Robinson (1972) presents a definition of an instructional system in his discussion of an authentic teacher preparation program when he states:

The program as a whole is systemic, as the essential elements require. A system is a collection of interrelated and interacting components which work in an integrated fashion to attain pre-determined purposes. Purpose determines the nature of the process used, and the process implies what components will make up the system. The application of such a systematic strategy to any human process is called the systems approach. Most systems are product-oriented; they operate in order to produce or accomplish something. How accurately these products reflect the systems' purpose is the critical measure by which we judge the systems' operation. (p. 49)

As a spokesman for the Northwest Regional Laboratory, Schalock (1969) defines an instruction system of teacher education when he says:

As used in the present context, an instructional system is an empirically developed set of learning experiences designed to bring about a given outcome for given kinds of prospective teachers with a given degree of reliability. The design of an instructional system involves the systematical analysis of that which is to be learned, and the specification of a set of learning experiences which have a high probability of leading the user of the system to a mastery of that which is to be learned. Within the context of teacher education, instructional systems may involve learning experiences which include lectures, small group discussions, reading, observation of films or real life settings, laboratory simulation, microteaching experiences, etc., of explicit performance outcomes that relate to explicit tasks that the prospective teacher is likely to have to perform.

The design of instructional systems within the context of teacher education requires that one specify both
the content and strategy of instruction (learning events) that have the greatest likelihood of bringing about the specified outcome for a given kind of learner (prospective teacher) in a given instructional setting. Such specifications require the matching of the content of a message and the strategy used in presenting it with learner characteristics, learning settings, and outcome. Ideally, as indicated earlier, such specifications should draw upon instructional principles, i.e., empirically established relationships between these sets of variables, but since these do not exist in abundance at present, most such specifications will have to be drawn from wisdom, hunch, and hope. (p. 63)

Schalock (1969a) provides the Oregon College of Education's definition of a systematically designed and operated teacher education program when he says that to be systematically designed and operated:

The requirement that each of the parts within the program, as well as the program as a whole, be designed so as to bring about specified outcomes, have empirically based evidence as to the efficiency and effectiveness with which those outcomes are achieved, and be adaptable on the basis of that evidence. (p. 11)

As a further definition (1969a) of what is meant by an instructional systems approach, Schalock (1969) presents three basic characteristics of the program:

1. It is designed to bring about a specified and measurable outcome;
2. It is designed so that evidence as to the effectiveness with which it brings about its intended outcome is continuously available; and
3. It is designed to be adaptive or corrective in light of that evidence.

He then goes on to enunciate just what the defining characteristics encompass by saying:
This is the case whether the part in question is an instructional experience, the procedures developed to personalize instructional experiences, the instructional program as a whole, or any of the mechanisms needed to implement the program. As such the program represents a process or way of proceeding. It is 'goal oriented', characterized by 'systems design' principles, 'corrective feedback loops', etc. In short, it is a process that requires the coalition to, (a) know what it is that it wants to accomplish, (b) order events in such a way that there is some probability of accomplishing it, (c) assess whether these events do in fact accomplish that which they are intended to accomplish, and (d) if they do not modify them until they do. (p. 13)

Houston (1972) follows Schalock's defining characteristics and necessary structural events with a discussion of instructional systems design. Houston (1972) begins with the statement and graphic representation:

Using systems design principles and methods aids developers to anticipate decisions and actions. A simple illustration of the systems approach includes four stages: define, develop, evaluate, and revise.

(p. 58)

Houston (1972) continues the discussion of the four stages of instructional systems design by indicating nine critical check points in the process of developing the instructional system. He lists the check points as the following functions:

Identify Problem. Problems may be identified in many ways: but no matter what the technique, an
essential task is to find a way, or several ways, to compare that which exists with that which is desired.

Analyze Setting. Identifying the problem and proposing tentative solutions help the team define the kinds of information to be collected.

Organize Management. Crucial areas that must be considered here are: 1) defining tasks and responsibilities required in the effort; 2) establishing of communication to organize the collection and distribution of information to the development team; and 3) establishing project planning and control procedures.

Identify Objectives. The crucial step in the process is identifying objectives which detail precisely terminal student performance.

Specify Methods. Specifying effective instructional strategies and media is essential to maximize the probability that learners will attain the desired objectives.

Construct Prototype. Actual fabrication of the prototype to test the first draft of the program developing an evaluation design, initiating a technical review of the proposed system by experts to detect any flaws, and constructing performance measures to assess post-instruction behaviors are all included in this stage of development.

Test Prototype. Testing instructional prototypes generally occurs at one of three general levels: 1) development tryout - looking for major flaws - revision run throughs; 2) validation tryouts - to see how well students achieve objectives; and 3) field tryouts - to determine whether other teachers and students can use the materials.

Analyze Results. Two activities are involved here. First, evaluation data are tabulated and processed. Second, relationships are analyzed between the methods used, results obtained, and the objectives and goals desired.

Implement/Recycle. From the interpretation of the data obtained during trials, revisions may be indicated, ranging from minor to quite crucial. Toward the end of the development effort, a decision is made to stop recycling and to initiate implementation. (p. 58-62)
Houston (1972) also points to the vehicle by which the instructional system design becomes actualized in competency-based teacher education programs when he informs us that:

The Instructional Module is increasingly being employed to actualize competency-based programs. It is a set of experiences intended to facilitate the learner's demonstration of objectives which were specified in the design phase of development. (p. 72)

Schalock (1969) again speaking on behalf of the Northwest Regional Laboratory says that having specified the tasks and behaviors or products of behavior in the prospective teachers, the systematic development of a competency-based teacher education program then requires:

1. The identification of the necessary conditions to bring about the successful performance of a task, i.e., to bring about the outcomes expected in the educational setting.
2. The specification of the knowledge, skills, and sensitivities that are needed by teachers to provide the conditions outlined in (1).
3. The specification of the conditions by which the knowledge, skills, and sensitivities needed by teachers to perform their various school tasks can be developed. (p. 60-61)

Weber (1969) speaking of the posture taken by the undergraduate elementary teacher education program at Syracuse University is in agreement with Schalock and Houston when he speaks of the method of actualizing an instructional systems approach:

The basic operating concept on which the program is built is an intent-action-feedback process model. Each instructional module, each component, and the total program functions within the demands of this concept. The model is an open model capable of accommodating and working constructively with many diverse views expressed in terms of (1) purposes or objectives (intent), (2) courses of action and actions (action), and (3) assessment and evaluation of outcomes (feedback). The process dimension of the
model demands that the program modify its intents,
actions, and feedback processes on the basis of its
own experiences. The model, then, has the potential
of reconstructing the experiences of the students,
teachers, and the program as a corporate entity.
(p. 90-91)

Allen (1968) presenting a model elementary teacher education
adds his opinion to the foregone authorities when he asserts:

Systems analysis has proven to be the most useful
method of organizing performance criteria. To
develop a teacher (or to use the words of system
analysis, 'product') of maximum effectiveness both
to himself and society, we must consider the many
inputs and outputs of the person, of the teacher
education program, and of the schools in which the
teacher is eventually placed. Further, we must con-
sider the way in which these three major components
interrelate among themselves. Systems analysis pro-
vides the most comprehensive method of organizing
objectives presently available. (p. 11)

Cooper (1969) makes a strong case for systems analysis in teacher
education programs when he discusses what the University of Massachu-
setts found in their efforts at program implementation:

Crucial to the implementation of a performance
curriculum is an organization which gives coherence
and structure to an educational program. Traditional
school and credit offerings give no guidance in this
regard. Systems analysis was found to offer a set
of basic understandings which provide a useful and
meaningful organization of the many diverse elements
or a teacher education program. This approach was
taken to organize, manage, and evaluate the program.
(p. 215)

Evaluation is consistently pointed to as a necessary part of any
educational system, but of particular importance to an instructional
systems approach to a competency-based program. In a discussion of
training for change agents, Havelock (1971) presents the philosophical
basis for evaluation by stating:
A program can be considered 'successful' if it has provided benefits to clients or to the society which outweigh the costs of the training.

Finally, at the highest level we can ask the ultimate question: Does this training, role behavior, and transfer of attitudes, knowledge, and skill do anybody any good? Is the world better for it in some way? In a most limited sense, the world is better if the trainee, the role set, the client system or the society is 'satisfied'. Usually, however, we try to look for harder evidence than this: e.g., is the client system more productive? Have costs been reduced? Has efficiency been increased? Is the total system function 'better' in some way? Have we added measurably or significantly to the life, liberties, happiness, or self actualization of people? (p. 72)

Findley (1972) in a discussion of accountability in communication and learning presents the methodology to deal with the problem of evaluation which Havelock's philosophy has presented. Findley (1972) compares an evaluative model of teacher preparation in Speech with that necessary for an instructional system in general, when he lists:

1. The first step in both models is the statement of purpose. The statement of purpose in instructional design is a general statement of the nature of learning that the system is designed to accomplish.

2. The objectives in instructional design are much more explicit than in speech preparation, stating precisely what the nature of the learner will be when he has accomplished the objective. Once the objective is specified it is possible to determine what criterion measure or test will be used to measure whether or not the objective is met.

3. The next stage in educational design involves analysis of all learning tasks to determine what the student needs to know to accomplish the objectives.

4. Educational design involves assessing the prerequisite knowledge of the student relative to the objectives of the system.
5. The educational designer identifies which of the learning tasks in the inventory are needed by the particular student and arranges them in the order the student will be expected to accomplish them.

6. The educational designer administers the inventory (material) of learning tasks needed by the student to accomplish the objectives.

7. The educational designer measures his effectiveness by administering a criterion test to determine whether or not the student has met the objective of the system.

8. Finally, the evaluator of an educational system analyzes the components of the system to determine the nature of their function to the overall purpose of the system. (p. 3-7)

Burke (1972) presents a corallary program and evaluative procedure to that provided by Finley, when he summarizes the format of the Competency-based Instructional System at Weber State College. Each of the separate instructional systems for presenting information to students consists of the following elements:

- **Title** - which identifies the topic
- **Introduction** - which provides the setting for the topic
- **Content** - which identifies the problems or considerations to be dealt with
- **Pre-assessment** - which assists the student to know his already attained level of performance
- **Behavioral Objectives** - which identify the behavior sought and at what level of proficiency
- **Learning Experiences** - which are suggested or required for meeting the behavioral objectives
Self Evaluation - which helps the student assess his progress

Proficiency Assessment - which is used to determine if the behavioral objectives have been met (p. 11-12)

Kravetz (1970) states that he perceives as the reality of evaluation of instructional systems:

Evaluation is needed to determine how well system goals have been achieved. This has been stated before and is the fundamental basis for research in evaluation. We must, of necessity call attention to the problem of goals. In the continuing search for criteria of educational effectiveness, it is reasonable to ask about the nature of the goals which are found either explicitly in educational systems' declarations of purpose, or implicitly in the nature of the evaluations which are undertaken.

Educational goals tend to be set and are characterized as follows:

(a) They represent the least common denomination of educational purposes, i.e., purposes about which almost no one would quarrel.

(b) They tend to be quite explicit in relation to the cognitive domain: the communications skills (reading, writing, speaking, spelling, grammar), the mathematical skills, and all others which deal with data, repetitive-observable processes, and mass-developed behavior patterns.

(c) They tend to be those which are either most measurable objectively, or most readily observed at any selected time of testing.

(d) They are usually quite general and not clearly-defined when they refer to non-cognitive development.

(e) Such goals as have been described in (d) above, are usually not readily amendable for use as evaluative criteria. Testing devices for system effectiveness (formal or informal) are quite unreliable.

(f) A number of system goals refer to the conditions of educational opportunity rather than to the gains made by individual students. (p. 14-19)
Kravetz (1972) concludes his statement with a comment that is seemingly common knowledge to all of the authorities before mentioned, but evidently many times forgotten in practice, when he says, "Yet, with the start of evaluation processes, no matter how crude, within the system itself, we note that goals are in need of continued study." (p. 19)

Elfenbein (1972) provides a summarizing statement to conclude this review of literature on instructional systems when she provides the definition of the systems approach:

A self-correcting and logical methodology of decision making to be used for the design and development of man-made entities ... includes formulation of performance objectives, the analysis of functions and components, then scheduling, the training and testing of the system, installation, and quality control. (p. 92)

Competency-Based, Performance-Based, Cognitively-Based Teacher Education

As reviewed earlier in this chapter, competency-based, performance-based and cognitively-based teacher education programs all use an instructional systems approach to their instruction. Considering that information, and the knowledge that the School of Education at Oregon State University is progressing towards a competency or performance-based teacher education program, it appeared necessary to review literature concerning these programs. For that reason, the following was reviewed, (1) philosophical basis for such programs, (2) how, if in fact, competency and performance-based programs differ, (3) methodological components, (4) evaluation of such programs.
Schalock (1972) begins a discussion of the focus of contemporary teacher education and the question: Knowledge, Teacher Behavior, or the Products? by presenting the following statement of the philosophical premise for performance-based instruction:

For several decades the primary basis for teacher certification has been a given grade point average for a given number of courses in given areas of study, coupled with a recommendation from a recognized teacher education institution that a particular student is 'qualified to teach.' Operationally, such criteria for certification require that a student demonstrate that he knows enough in various courses that he can pass them with a grade of 'C' or better; that he is able to apply that which he knows at some minimal level as a 'student teacher'; and that he is physically, mentally, morally, ethically, and attitudinally acceptable as a member of the teaching profession. The judgment is by representatives from the faculty of the college at which he is matriculating and by the supervisor of this student teaching experience.

Generally speaking the basic assumption underlying such an approach to certification is that knowledge of subject matter, teaching methods, children's learning, and so forth -- as measured by course grades -- is a basic predictor of teaching capability. Such knowledge is coupled with a brief testing of the ability to apply what is known in a student teaching situation and a subjective judgment as to the acceptability of a particular student to the teaching profession. The reverse assumption is also applied: There is no need to systematically gather evidence as to the ability of a prospective teacher to behave in specified ways, or of his ability to carry out the functions for which he will be responsible within a school once he is certified.

The point of view represented by a 'performance-based' approach to teacher certification denies such an assumption, and holds in its place the following:

1. More systematic specifications of that which is to be known, as well as more stringent criteria for knowing, must be introduced within teacher education.
2. Knowing and the ability to apply that which is known are two different matters, and the certification of teachers should focus as much upon that which a prospective teacher is able to do as it does upon that which he knows.

3. The criteria for assessing that which a prospective teacher can do should be as stringent, as systematically derived and as explicitly stated as the criteria for assessing that which he knows.

4. The assessment of both that which is known and that which can be done must be carried out and described systematically.

5. When a prospective teacher has demonstrated that he knows and can do that which is expected of him, only then will he be granted certification. (p. 43-44)

Daniel (1970) raises some added philosophical questions to those provided by Schalock when he argues:

It is apparent that no clear dichotomy exists between 'performance-based teacher certification' and 'non-performance-based teacher certification'. It is more appropriate to perceive a continuum with demonstrated teaching performance at one end and characteristics which can be identified outside the teaching situation (e.g., intelligence test scores, personality traits, knowledge of subject matter) at the other. A teacher certification process which might be located at the center of the continuum would rely equally on performance factors and non-performance factors. Teacher certification processes located at either end of the continuum would rely on performance factors exclusively or non-performance factors exclusively. It is the position of persons advocating performance-based teacher certification - including this writer - that teacher certification practice should move toward the performance-based end of the continuum. There is not agreement, however, as to how far such movements should go and how fast such movements should proceed. (p. 2)

Daniel (1970) then makes a very strong assertion when he states that "Performance-based certification is needed simply because it makes good sense. It has long been obvious to laymen and professions that a demonstrated ability to teach is the best evidence of teaching ability." (p. 8)
Elfenbein (1972) explored 17 programs from 13 institutions in the United States in a comparative description of performance-based teacher education programs. From that study he states that, "the terminology is a focus of disagreement: some educators refer to programs as performance-based," others call them "competency-based".

Elfenbein (1972) defines both in the following manner:

A competency-based (or performance-based) teacher education program is a program in which the competencies to be acquired by the student and the criteria to be applied in assessing the competency of the student are made explicit and the student is held accountable for meeting those criteria...

(p. 4)

Houston (1972) both presents the philosophical structure and the methodology for its actualization when he discusses CBTE (Competency-based Teacher Education) programs:

The very notion of CBTE implies a clear idea of what the student is to become. The emphasis is on the objectives rather than activities. Such objectives are stipulated in advance, described in explicit, observable terms, and made known to the student prior to any related instruction. Activities then are designed to contribute to the student's demonstration of objectives, and evaluation of a student's progress or of the program's viability in terms of such objectives.

Three types of objectives are pivotal in competency-based programs: cognitive, performance, and consequence objectives. In cognitive-based objectives, the participant is expected to demonstrate knowledge and intellectual abilities and skills. In performance-based objectives, the participant is required to do something rather than simply to know something. While contingent upon knowledge, performance-based objectives place the emphasis on observable action.

In consequence-based objectives, the participant is required to bring about change in others.
Objectives in the affective domain are imbedded in all other classes of objectives, but tend to resist the specific description expected of the first three types. (p. 5-6)

Houston (1972) does not share the view that competency-based and performance-based are the same thing. Listening to proponents of the two terminologies they seem to be referring to the same movement. However, Houston (1972) makes the following distinctions:

Advocates of performance-based terminology refer to the way in which teachers demonstrate teaching knowledge and skills. That demonstration is observable (and their objectives are to 'write,' 'do,' 'describe'; not 'understand' or 'perceive' which are nonobservable). Further, performance reminds us that knowledge of content and teaching strategies is not sufficient in teaching - overt action is important.

Competency-based emphasizes a minimum standard; it adds criterion-levels, value orientations, and quality to the definition of the movement. While competency advocates note three levels for criteria - cognitive, performance, and consequence - they press for the latter as the most significant measure of effectiveness. Performance advocates, also recognizing consequence as the ultimate test of an individual's effectiveness, point out that many intervening variables affect results. They stress that our present understanding of these variables and our inability to control them adequately in field settings preclude consequence objectives as realistic requirements. Thus, objectives requiring performance become the major ones in a teacher preparation program, and performance-based is more descriptive as a generic name for this movement. (p. 25-26)

Elam (1971) speaks for the AACTE when he says that the American Association of Colleges for Teacher Education Committee on Performance-Based Teacher Education has chosen to retain the term "performance-based" in the belief that the term itself is relatively unimportant if there is consensus on what elements are essential to distinguish
performance or competency-based programs from other programs. Elam (1971) states the AACTE Committee's findings in this manner:

There now appears to be general agreement that a teacher education program is performance-based if:

1. Competencies (knowledge skills, behaviors) to be demonstrated by the student are:
   . derived from explicit conceptions of teacher roles,
   . stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
   . made public in advance;

2. Criteria to be employed in assessing competencies are:
   . based upon, and in harmony with, specified competencies,
   . explicit in stating expected levels of mastery under specified conditions, and
   . made public in advance;

3. Assessment of the student's competency:
   . uses his performance as the primary source of evidence,
   . takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, and
   . strives for objectivity;

4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion;

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified. (p. 6-7)

Massanari (1971) reiterates the belief that if nothing else, the terminology of performance-based teacher education is being defined differently by different people. Most programs in operation appear to focus on the performance of perspective teachers and/or
teachers on-the-job. When this focus is taken, the question of what elements are to be included in considering the performance of the prospective teacher becomes important. Massanari (1971) states in this respect:

Most, if not all, of the preparation programs studied thus far are designed so that the professional studies component is the part that is performance-based; the general studies and specialized studies have not been reconstituted. Within the professional studies component, emphasis is placed on the knowledge, skills, and attitudes needed by the teacher and on practice experiences in simulated and real-life situations.

Apparently, the professional studies component is a collection of performance-based instructional units requiring much independent study by the prospective teacher. Specific behavioral objectives are defined prior to instruction, in terms indicating the kinds of evidence regarding performance that would be acceptable to show that the objectives had been attained. Both the objectives and the kinds of evidence are made explicit to the learners at the outset of the program. For each performance objective, the learning of the prospective teacher is guided by periodic assessment and feedback.

The learner attains the objective whenever he can produce the required evidence in the terms originally stated; he produces such evidence by demonstrating that he has the requisite knowledge and/or he can perform the specified tasks acceptably. (p. 2)

Allen (1968) speaks to the question of performance demonstration eluded to by Massanari when he discusses the criteria by which performance is measured:

The formulation of performance criteria required the specification of instructional and program goals in terms of behaviors to be exhibited by the trainee when instruction has been completed. Performance criteria, as we have defined them, are essentially behavioral objectives. They state the behavior expected of the teacher, under what conditions the behavior will be performed, and how
the behaviors will be evaluated. In addition, at least two instructional alternatives are provided for each performance criterion. Careful formulation of performance criteria liberates the planners from describing the program in terms of traditional "courses". Rather it is recognized that there are alternative paths to reaching many of the criteria. The development of meaningful criteria and the alternative paths for meeting these criteria has been of central concern to the architects of this program.

Performance criteria have been developed in three broad conceptual areas related to teaching: (1) content knowledge, (2) behavioral skills, and (3) human relations skills.

Elam (1971) considers the problems, issues and concerns of choosing the criteria for acceptable student performance and the method of evaluating those criteria when he strongly states:

One of the humiliating uncertainties that hovers over every PBTE experiment, however, is this: What will be accepted as evidence of successful performance by the teacher candidate? Unfortunately, we do not even have a satisfactory list of crucial skills and behaviors which a teacher must possess in order to perform reasonably well and to survive in the ordinary classroom with personal satisfaction. (p. 8)
Elam (1971) then concludes his discussion of the necessity for a sensible method of evaluation when he says:

... the overriding problem before which the others pale into insignificance is that of the adequacy of measurement instruments and procedures. PBTE can only be successful if there are adequate means to assess the competency of the student. The bulk of the effort in establishing PBTE is most likely to go into the development of new instructional materials, into working out arrangements with the bursar and registrar, into devising ways for practicing teachers and administrators to share decision making, into moving the program into the field, and - most important of all - into developing ways to use faculty and librarians most effectively in the operation of unconventional modules in a conventional system. But, when all this is done, an institution will still not have moved beyond current conventional grading procedures unless new methods are found for assessing the complex cognitive and affective objectives which are such as an essential part of the training of teachers. (p. 22)

Payatte (1972) found performance-based modules in a self-instructional format becoming an increasingly significant part of the instructional component of teacher education programs in many institutions throughout the country. He found measurement of the effectiveness of performance-based teacher education models a task of utmost importance to the program developer who must convince the user that the program, itself, performs. Payatte (1972) states the purpose of his study this way:

This study had two purposes, both related to the evaluation of self-instructional, performance-based modules used in teacher training programs. First, a simple evaluation design was used to determine the effectiveness of two modules used with preservice and inservice teachers. Secondly, a questionnaire was used to determine whether these two groups of teachers reacted differently to the modules. (p. 2)
Two performance-based, self-instructional packages, called modules, were used in this study. Each module contained all the information and directions required for the learner to achieve several observable, measurable goals. A set of learning activities was used to develop the instruction for each objective in a module. The set consisted of: 1) exposure to the objective of the set, 2) practice with the concept involved, 3) feedback on the practice, 4) confirmation of feedback, 5) review of concept, and 6) evaluation. The evaluation for each set provided the basis for a criterion-references test item to be used on the post-test for the module. Criterion-references test items for all of the objectives in a module constituted the post-test for that module. (p. 2)

Payatte (1972) used three classes of students enrolled in "Designs for Teaching" at the University of West Florida as the pre-service group for the evaluation study. Payatte describes his instruments (tests and questionnaire) thusly:

Tests. Criterion-referenced tests were used to determine whether the objectives of the modules had been achieved by the students. One test was constructed for each module. Each test had one criterion-referenced item for each instructional set for which a written item was an appropriate test situation. The test for the module on preparing a plan had a total of fifteen items, and the test for the module on making a presentation had four. Tests for both modules demanded knowledge of the concepts developed; thus, the emphasis was on recall.

Questionnaire. To elicit a reaction to the performance-based modules a two-part questionnaire was used. Part I of the questionnaire was designed to determine the reaction of the following three items: 1) the content of the instructional material, 2) the instructional mode used, and 3) the method of implementation. For each item, the student was directed to indicate whether he disliked or liked it by putting a check on an eleven point (-5 to +5) scale.

Part 2 of the questionnaire was designed to elicit a response to the same three items - content, mode of instruction, and method of implementation. (p. 3)
Payatte (1972) explains the method of determining the effectiveness of the two teacher-education modules in the following graphics and concise explanation:

A simple single-criterion evaluation design was used to determine the effectiveness of the two teacher-training modules. The greatest value of the evaluation design is in determining: (1) whether the material being evaluated should be further devised and developed and (2) if a need for further development is indicated, where it is required.

The design concept is illustrated in Figure 1. It consists of a pre-test and an Identical post-test administered to groups of learners who have been through a self-instructional learning sequence.

**Visual Illustration of Simple Single-Criterion Evaluation**

Data required for the appraisal of effectiveness are:

- **N** = the number of students participating in the instructional sequence.
- **GROUP/MODE** = the groups being compared/the modes of instruction being used (in this case only on mode - self-instructional through modules).
- **PRETEST MEAN (Raw)** = the mean of correct responses earned by students on the pretest.
- **% CORRECT PRETEST** = the percent of the total of possible responses represented by the mean of correct responses on the pretest.
- **POSTTEST MEAN (Raw)** = the mean of correct responses earned by students on the posttest.
% CORRECT = the percent of the total of possible responses represented by the mean of correct responses on the posttest.

% GAIN/LOSS = the difference between the percent correct on the pretest and the percent correct on the posttest.

NO. ITEMS = the number of items on the posttest. (Since the pretest is identical to the posttest, there will be only one number.)

If the posttest consists of criterion-referenced test items from the instructional sets within the material, an item-by-item productivity analysis can be done which will indicate which sets need revision or further development. (p. 4-5)

Payatte (1972) still found one uncomfortable aspect to the evaluation of effectiveness of an instructional system or module.

At what point is a module judged effective? Payatte concludes that:

In a study of this kind some point must be established for deciding when a module is effective. Strictly interpreted, the concept of performance-based teacher training employs a pass-fail criterion and, therefore, requires 100% achievement of objectives if instruction is to be considered effective. In most cases, however, this is unrealistic. Preliminary evaluation studies on the effectiveness of the materials used in this study had indicated that a mean of correct responses of about eighty percent was achievable. For the purposes of this study, then, a mean of correct responses of eighty percent was established as the point for deciding effectiveness. Assuming a zero starting point, not an unreasonable assumption when performance depends heavily on vocabulary as it did in the two modules evaluated, the decision that a module is effective was made at the point where percent gain from pretest to posttest reached eighty.

Applying this criterion, the module on presenting, which yielded 85% gain for preservice teachers and 80% gain for inservice teachers, was considered effective. The module on planning was deemed to be in need of revision since its yielded gain was less than 80% in both groups. The data clearly indicate that the majority of both groups achieved the objectives
of both modules - as they were measured by the criterion-referenced tests. More than this must be demanded of performance-based instructional materials, but just how much more is a debatable question. (p. 10)

And finally, Garrison (1968) suggests the vehicle by which the goals of an instructional system can be defined and the system's effectiveness in relationship to the commission of those goals can be evaluated. Garrison (1968) states:

A long step toward operational definition of educational goals has been taken through the two handbooks on the Taxonomy of Educational Objectives. Handbook I: Cognitive Domain was first published in 1956 and Handbook II: Affective Domain in 1964. An examination of these two handbooks provides considerable insight into how to attack our problems of specifying the curriculum for the Model Teacher Education Program. (p. 154)

Garrison's assertion leads to the final area of this review of related literature and research. A review of the literature and research on Bloom's Taxonomy of Educational Objectives. Handbook I: Cognitive Domain will culminate this review.

Bloom's Taxonomy of Educational Objectives has in the past, and is at the present, enjoying wide use in education in general and in instructional systems in specific. Its use was of central focus in this study as well. For these reasons, a fairly exhaustive review of the taxonomy seemed necessary. Provided this situation, the following areas of research and literature were reviewed with respect to the taxonomy: 1) Philosophical premise for stating objectives and
evaluating outcomes, 2) Historical development of taxonomy, 3) Nature of taxonomy, 4) Validation of taxonomy, 5) Implications of taxonomy for instruction. (See condensed version of Taxonomy of Educational Objectives, Cognitive Domain in Appendix A.)

Bloom (1963) in a volume of research on teaching by Gagne, discusses the testing of cognitive ability and achievement in the educational process. He begins his remarks by saying:

The research worker who wishes to understand teaching and teachers must understand not only the teaching and educational process as it takes place but also the outcomes or effects of the process - the changes that take place in the learners. Is teacher A more effective than teacher B? Is one method of teaching more effective than another method of teaching? Is one set of learning experiences more effective than another set of learning experiences? No matter how the problem is posed the research worker must have a set of criteria by which to determine more and less, better and worse, effective and ineffective.

The writer takes the position that unless the criteria of effectiveness are related to changes in students, the researcher has avoided the primary criterion and has used only proximate criteria. (p. 379)

Bloom (1963) further supports his first assertion by saying that "research on teaching must, in most cases, make use of measures of cognitive achievement to determine whether the teaching method, instructional procedure, or the teacher does produce changes in the learner." (p. 379)

In a discussion of learning experiences as ways of modifying behavior, Bloom (1963) conceives learning as a change due to experience, in the student's ways of thinking, feeling and acting. Bloom
feels that the effectiveness of the instruction may be thought of in terms of, "1) the magnitude of the changes taking place in the individual student or 2) the proportion of the students who have changed significantly in one or more characteristics relevant to the learning process." (p. 386) Bloom (1963) says that this conception of education requires that teachers and perhaps learners be clear about the changes which instruction should bring about. He then goes on to extrapolate:

It also requires that the appraisal or evaluation procedures be so organized and developed that it is possible to determine the changes which the learning process does produce. Finally, it requires that the teachers and curriculum workers find ways of determining what learning experiences are effective in bringing about changes in individual learners or in groups of learners. (p. 386)

In an extension of his statement of the necessity of a determination of the effectiveness of learning experiences by educators. Bloom (1963) offers this discussion of a methodology:

One function of evaluation is the careful determination of the effects of learning experiences. This requires a clear definition of the conditions presumed to set up the learning experiences, the identification of the changes which have taken place, if any, and if possible, the range of students and conditions under which significant changes do take place. (p. 387)

Bloom maintains that educational psychologists have been especially concerned that research workers match the hierarchy of educational goals of teachers with adequate measuring devices and recognize the multi-dimensionality of both teaching competence and learning outcome. He follows this contention with the assertion:
From what has been already said about education and educational experiences, it follows that the nature of a particular sequence of educational experiences should be determined by the educational objectives it is designed to further. Educational objectives are statements of desired changes in the thoughts, actions, or feelings of students that a particular course or educational program should bring about. Educational objectives, as they have been used by evaluators, teachers, and curriculum workers, are relatively specific statements of the characteristics the students should possess after completing the course or program. Some have distinguished between educational objectives and the more general statements of aims or goals. (p. 389)

Bloom (1963) concludes his discussion with his perception of the vehicle best able to present, categorize and provide foundation for evaluation when he says:

The range of educational objectives which fall in the cognitive domain is illustrated by the Taxonomy of Educational Objectives (Bloom, et al., 1956). The Taxonomy consists of a classification scheme in which a large number of educational objectives have been classified and the evaluation techniques appropriate to each class and subdivision have been presented and discussed.

These compilations and classifications of educational objectives serve to show the variation in educational objectives among schools and colleges. If the classifications have, in fact, a basis in learning theory and the psychological process involved in learning, we may expect that educational research will begin to reveal the extent to which similar learning processes are involved in objectives classified under a single subclass. (p. 391)

Bloom (1956) defines a taxonomy by contrasting it with a classification system in his Handbook I: Cognitive Domain by stating:

Taxonomies, particularly Aristotelian taxonomies, have certain structural rules which exceed in complexity the rules of a classification system.
While a classification scheme may have many arbitrary elements, a taxonomy scheme may not. A taxonomy must be so constructed that the order of the terms must correspond to some "real" order among the phenomena represented by the terms. A classification scheme may be validated by reference to the criteria of communicability, usefulness and suggestiveness; while a taxonomy must be validated by demonstrating its consistency with the theoretical views in research findings of the field it attempts to order. (p. 17)

It has not been the practice to summarize or interpret the research or literature presented thus far. Instead, quotes have been used directly to avoid basis or misguidedness in interpretation. However, it does not seem practical nor sensible that Bloom's discussion of the taxonomy's historical development be directly quoted, as it is long and can be better presented by a condensation of those parts which are most relevant to this study.

The condensation is as follows: In 1948 a group of college examiners conceived the idea of developing a classification system for educational objectives. The purpose was to facilitate communication about test items, educational objectives and testing procedures. Up until this time communication among them was impaired by the lack of a standardized vocabulary and conceptual framework.

The group developed three classification systems or taxonomies, each in a different domain of behavior; cognitive, affective and psychomotor. The first to be completed was the cognitive domain and one thousand copies of it were printed and distributed in a preliminary edition to public school and college educators, and others
with the request that the volume be criticized. These criticisms were taken into account in the preparation of the 1956 publication.

The developers agreed that as a first priority the taxonomy should reflect distinctions teachers make about student behaviors. As a second priority, it was agreed that the taxonomy should be logically developed and internally consistent. Third, the taxonomy should be consistent with present understanding of psychological phenomena. And finally, the taxonomy should be descriptive and should be neutral in regard to educational philosophy or content area. It is important that attention was paid to producing a taxonomy which would be educationally useful. It was recognized that logical and psychological relevance, technical excellence and comprehensiveness might suffer at times to achieve educational meaningfulness.

The taxonomists had to choose the phenomena in which to develop the taxonomy. They choose the student behavior which a test item was to elicit. In this regard, they realized that the behaviors which an item evokes might be different due to prior experiences of the students.

The group then decided the intended behaviors or processes could be categorized into broad groups including: 1) Knowledge, 2) Comprehension, 3) Application, 4) Analysis, 5) Synthesis, 6) Evaluation. Within each broad group a specific set of subgroups was categorized. The broad groups of behaviors or processes were then arranged in what was believed a hierarchical structure as mentioned in categories one through six.
The structure was assumed to be hierarchical on the basis that behaviors which define the first broad category were regarded as being integrated with new behaviors in the next higher category, and that the integration of these behaviors and new behaviors represented the next higher category, etc. The specific subgroups were arranged in order of complexity, if not hierarchy.

To lend credibility to the condensation provided, the following statements from Bloom (1956) are provided:

... the taxonomy should be a source of constructive help on these problems. Teachers building a curriculum should find here a range of possible educational goals or outcomes in the cognitive area ('cognitive' is used to include activities such as remembering and recalling knowledge, thinking, problem solving, creating). (p. 2)

Paying more attention to the taxonomy's ability to aid in the evaluation of educational outcomes, Bloom (1956) states that, "curriculum builders should find the taxonomy helps them to specify objectives so that it becomes easier to plan learning experiences and prepare evaluation devices." (p. 2)

Bloom also contends that, "once they have classified the objectives they wish to measure, teachers and testers, working on evaluation problems may refer to the discussions of the problems of measuring such objectives." (p. 3)

Speaking of difficulties encountered in the development of the taxonomy, Bloom (1956) says:

We initially limited ourselves to those objectives commonly referred to as knowledge, intellectual abilities, and intellectual skills. (This area,
which we named the cognitive domain, may also be described as including the behaviors: remembering, reasoning, problem solving, concept formation, and, to a limited extent, creative thinking.) We proceeded to divide the cognitive objectives into subdivisions from the simplest behavior to the most complex. We then attempted to find ways of defining these subdivisions in such a way that all of us working with the material could communicate with each other about the specific objectives as well as the testing procedures to be included. (p. 15)

We have not succeeded in finding a method of classification which would permit complete and sharp distinctions among behaviors. (p. 15)

A second difficulty in classification results from the fact that the more complex behaviors include the simpler behaviors. If we view statements of educational objectives as intended behaviors which the student shall display at the end of some period of education, we can then view the process as one of change. As teachers we intend the learning experiences to change the student's behavior from a simpler type to another more complex one which in some ways at least will include the first type. (p. 16)

Bloom (1956) says, "this is the basic problem of a taxonomy - to order phenomena in ways which will reveal some of their essential properties as well as the interrelationships among them." (p. 17)

Bloom (1956) states that, "in general, test material can be satisfactorily classified by means of the taxonomy only when the context in which the test problems were used is known or assumed." (p. 21)

As a note of caution to the users of the taxonomy, Bloom further adds:

... although we have little difficulty in determining the major class within which a behavior falls, we still are not satisfied that there are
enough clearly defined subclassifications to provide adequately for the great variety of objectives we have attempted to classify. (p. 21)

The following list of questions which Bloom believes his taxonomy will provide possible solutions that might serve as a culminating statement of the taxonomy's purpose. Bloom (1956) lists the following questions which the Taxonomy of Educational Objectives: Cognitive Domain might mediate:

1. What educational purposes or objectives should the school or course seek to attain?
2. What learning experiences can be provided that are likely to bring about the attainment of these purposes?
3. How can these learning experiences be effectively organized to help provide continuity and sequence for the learner and to help him in integrating what might otherwise appear as isolated learning experiences?
4. How can the effectiveness of learning experiences be evaluated by the use of tests and other systematic evidence-gathering procedures? (p. 25)

Kropp and Stoker (1966) point out the fact that Bloom's Taxonomy of Educational Objectives is indeed being used extensively in education but indicate a necessary examination of the taxonomy's validity when they state:

The taxonomy is receiving increasingly wider use in education. The current uses go far beyond merely facilitating communication about educational objectives. These include establishing series of educational objectives which are ordered ostensibly according to increasing complexity, the analyses of educational behaviors into the taxonomic classification, exploratory experimentation in the development of instructional programs intended to foster cognitive development, etc. Although these uses constitute justifiable common-sense employment of the taxonomy, it does seem that their legitimacy rests on the assumption that the taxonomy structure is verifiable. It is the intention of this project to initiate these validational studies. (p. 17)
In support of their contention that validation of the taxonomy is necessary, Kropp and Stoker (1966) present the following points:

The validation of the taxonomy would have several distinct theoretical and practical advantages. First, it would enable those who use it in the intended sense to do so with greater confidence. Second, it would provide a sound basis on which to develop sequential educational programs intended for the systematic development of increasingly more complex objectives. Third, if the processes are found to be general over content, then the processes themselves might be considered as desirable educational objectives for no other reason than their pervasive and enduring nature and the temporality of most content. Fourth, it would provide a novel theoretical framework in which to consider certain educational problems; e.g., educational underachievement might become amenable to study as a phenomenon which is explainable on the basis of cognitive disability of underdevelopment of a nonorganic and nonpathological kind, instead of on the prevalent but somewhat secondary ground of invoking social and emotional variables as the primary explanatory concepts. Fifth, if it can be demonstrated that the major levels of the taxonomy are unique arrangements of known aptitudes which pervade all levels or if it can be shown that each succeeding level is explainable by an increasingly larger set of aptitudes, then a new research avenue will be opened which might lead to the deliberate development of broad aptitudes or processes and perhaps the experimental creation, through novel instructional programs, of aptitudes which have not yet been identified. (p. 18)

One would think that on the strength of the widespread use of Bloom's Taxonomy in education the literature would show many studies dealing directly with the taxonomy. Such is not the case; very few studies dealing directly with the taxonomy appear in the literature.
Kropp and Stoker (1966) found as a part of their three-year study of the validity of the taxonomy the following studies:

Stanley and Bolton (1957) reported several related studies of the extent of agreement of item classifications which were made by their graduate students. They administered Terman's Concept Mastery Test, Form T, to 46 students in a beginning graduate course, "Principles of Appraisal and Evaluation in Education." The eight highest scoring students (101-135) were asked to classify independently the 227 items in Gerberich's Specimen Objective Test Items, A Guide to Achievement Test Construction according to the six major levels and the twenty-three sublevels of the Taxonomy. Prior to this classification exercise, all class members had studied the Taxonomy for four weeks. The agreement among the eight judges was quite high when only the six major levels were taken into account. The raters classified the items as follows: Knowledge, 51 percent; Comprehension, 19 percent; Application, 8 percent; Analysis, 5 percent; Synthesis, .6 percent; and Evaluation, 4 percent. The raters judged that 12.5 percent of the items did not fall in the cognitive domain. (p. 32)

Kropp and Stoker (1966) summarized the following from the studies they had received:

Trained raters can classify test items into taxonomy categories with high agreement when the basis of the classification is the behavior which the item is intended to evoke. However, neither of the studies nor ours deals with the relationship between the process the author intended to evoke with the item and the process the item actually evokes from the student. (p. 34)

Kropp and Stoker (1966) summarized research by Smith (1965) which would validate the hierarchical structure of the major levels of knowledge and comprehension but not the sublevels. Kropp and Stoker (1966) write:
Smith (1965) investigated the scalability of the Knowledge and Comprehension levels of the Taxonomy. A fifty-five item, four-choice multiple-choice test was constructed on five educational psychology concepts. One item was prepared for each concept for each of eight Knowledge sublevels and the three Comprehension sublevels. The test was administered to 341 educational psychology students who had been introduced to the content through lecture or textbook. Because it is claimed that the Taxonomy is arranged from simple to complex and from concrete to abstract, item difficulties should increase as Taxonomy level increases. Smith also claimed that this relationship should hold for the sublevels of any major Taxonomy level. He found a rank order correlation of .76 between the actual ranking of sublevel difficulties and the theoretical rankings. It indicates a general increase in item difficulty as level increases within Knowledge and Comprehension. The intercorrelation matrix of Knowledge and Comprehension sublevel scores failed to form a simplex. Thus, the hypothesis of a hierarchical structure of the sublevels of the first two levels was not supported. The inter-item correlations in the three sublevels of Comprehension across the five educational psychology concepts utilized were positive, but no longer than might be expected by chance. Thus, it would appear that the processes measured by the items of sublevels are not general over content.

The three-year study of the validity of Bloom's Taxonomy by Kropp and Stoker (1966) is itself the most comprehensive and complete study available in the research. The following discussion of problem, questions to be researched, methods of evaluation and results are extracted from Chapter Seven: Summary and Recommendations. Kropp and Stoker (1966) summarize:

The major purpose of the project was to determine the construct validity of the classification scheme presented in the Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. (p. 163)
Three questions were considered:

1. Can empirical evidence be found to support or refute the imputed hierarchical structure?
2. Can empirical evidence be found to support or refute the imputed generality of the several cognitive processes?
3. Can each level of the structure be explained by more elemental cognitive aptitudes, and if so, do the combinations or numbers of them change systematically from one major level to the next? (p. 164)

The question or hypothesis about hierarchical structure was investigated with two sets of data. Mean scores on the processes (levels of the taxonomy) were examined to determine if they decreased as the complexity of the levels increased. The intercorrelation matrix of process (level) scores were examined for the presence of circumplex structure as described by Guttman's Radex Theory. These intercorrelation matrices were also factor analyzed and the factors were examined for generality over content.

The third question, which dealt with the psychological structure of the taxonomy, was cast into an exploratory study. The exploratory study involved generating orthogonal cognitive aptitude scores and determining their regression weights for each of the processes (levels) within and over contents. (p. 164-165)

Four special tests were constructed for the study because none was available commercially or from other investigators which would yield scores corresponding to the levels of the taxonomy. (p. 165)

Finally, Kropp and Stoker (1966) found the following results:

The hypothesis of inverse relationship of mean performance and taxonomic level was generally supported. For the social science forms, means for all grades were in the predicted order. For the science forms there was a systematic reversal of means on the Synthesis and Evaluation subtests.

The simplex analyses offered some support to the hypothesis of hierarchical structure. For all analyses of the social science forms for grades ten, eleven, twelve, and all grades combined, the
hypothesized order was the best order in terms of simplex order. For one science form at all grade levels, the same order of variables led to simplicial structure and it was different from the hypothesized order. It placed Evaluation between Knowledge and Comprehension.

On the basis of these results, the conclusion was drawn that there was a clear tendency for the empirical data to support the imputed hierarchical structure of the taxonomy.

The studies to determine the aptitude structure of the taxonomic levels were impaired because only eight common factors (six were common to four grades and two were common to three grades) could be extracted, whereas sixteen were expected to emerge, and because the majority of factors from the analysis of the taxonomy-type tests were mixtures of content and process. (p. 167-168)

Smith (1972) studied the Validity of Tests of the Cognitive Processes in which he stated his purpose as:

The purpose of this investigation was to test two hypotheses concerning the ability of taxonomic tests of the cognitive processes to differentiate the performance of students from varying educational environments in an effort to shed additional light on the construct validity of the Taxonomy. (p. 1)

Defining the educational environments experienced by the subjects of his study, Smith lists (OS) open and spontaneous and (CT) conventional and traditional. Smith's (1972) results are presented as follows:

The results concerning the hypothesis that performance on the first four taxonomic levels favor students from the CT environment is supported only in the case of the Knowledge and Comprehension subtests. Contrary to the hypothesis, no significant differences due to school environment were identified on the Application subtest, while performance on the Analysis level test significantly favored students from the OS climate. As might be expected, the tests
of the first four levels appear to be sensitive
to developmental differences since 11th-graders
performed significantly better than 10th-graders
on the Knowledge, Application and Analysis sub-
tests. Sex differences favoring males also appears
but only with respect to the application level test.

The findings concerning the upper levels of the
Taxonomy are supported; performance on the Synthesis
and Evaluation subtests favors students from the OS
climate.

In summary, the findings appear to be both confirm-
ing and rejecting of the hypotheses. While differ-
ences due to school environment appear to be the
strongest with respect to the magnitude of the effects,
two of the six predicted relationships (Application,
Analysis) were not supported.

The general findings do indicate that the lower level
processes favor students from the CT climate, while
the upper processes favor those from the OS climate.
What is apparently needed, then, is a conception of
the taxonomic processes that integrates both the
positive findings. (p. 4-5)

Consistent with the cumulative and hierarchical assumptions of
the taxonomy, Smith (1970) demonstrated that intellectual but not
creative ability is related to performance on Knowledge, Comprehen-
sion, Application and Analysis subtests. In his study of I.Q.,
creativity and the Taxonomy of Educational Objectives: Cognitive
Domain, Smith (1970) states that, "the results appear to support
the conceptualization of tests of the first four and last two levels
of the Taxonomy in terms of convergent and divergent processes,
respectively." (p. 58-60)

In a study for Utilizing a Systems Approach to Design a Series
of Modules for Secondary Education Majors, Von Fange (1971) expands
the discussion of the implications of Bloom's Taxonomy for instruction when he says:

For a number of years, concerned educators have sought to help students develop various teaching skills; to express themselves through emotion and feeling; and to develop various motor skills all of which were known to be essential if education was to change people and help them fulfill their respective roles in American democracy. Not until the work of Bloom and Krathwohl in identifying, defining, and classifying instructional activities has there been any systematic study of attainable behavioral objectives. Their efforts, together with the help of many educators, psychologists, and test designers, have provided meaningful assistance to teachers who desire to accomplish more than simply holding classes or covering a stated number of pages of material. (p. 16)

In relation to evaluation of an instructional system's effectiveness Von Fange (1971) makes the following statement:

Measurement deals with administering and scoring various tests. Evaluation of student progress entails much more than simply designing, administering, and scoring tests. It includes making judgments about progress in terms of some standard whether in performance, conduct, or attitude. Some form of measurement seems necessary for evaluation, but the teacher needs to remember that testing reveals how well or poorly the teacher has taught just as it reveals the extent of student learning. It seems obvious that a test should include only items which measure attainment of what has actually been studied (validity). In addition, test items need to be designed in such a way that the measurement is accurate and consistent (reliability). Ambiguous statements, catch questions, etc. have no place in educational measurement designed to promote evaluation. (p. 54)

After a discussion of test development and an explanation of true-false, multiple-choice, completion and essay questions, Von Fange (1971) goes on to support the use of Bloom's Taxonomy for
the development of an instructional system by saying:

In deciding what question type to write and the cognitive level for which to design the question, it is necessary to review the behavioral objectives and all important outcomes of the instructional program for which student attainment is being measured. After planning the test on the two dimensional grid, write the first draft of each question, then at a later time revise the statements after a critical appraisal. Following the guidelines suggested will help the test designer avoid some of the usual errors, but only practice in writing questions together with a critical appraisal of prepared questions will hasten the day when the art of preparing effective questions to assess the attainment of objectives will be mastered. A careful study of questions designed for the various cognitive levels by Benjamin S. Bloom in his Taxonomy of Educational Objectives, Cognitive Domain, is strongly encouraged. (p. 51)

This concludes a review of literature and research pertinent to this study. In summary, this review dealt with, 1) the need for, and use of a knowledge of linguistics in public education, particularly as it relates to the education of culturally different children, 2) linguistics in teacher education programs, 3) written materials in linguistics and cultural diversity available for teacher education, 4) instructional systems, 5) competency, performance and cognitively-based approaches to teacher education, 6) Bloom's Taxonomy of Educational Objectives: Cognitive Domain.
III. DESIGN OF THE STUDY

This chapter deals with seven topics related to the design of the investigation; (1) population and sample, (2) experimental design, (3) linguistics and cultural diversity: an instructional system, (4) measuring instrument, (5) validation committee, (6) pilot study, (7) proposed treatment of data.

Population and Sample

The population consisted of approximately 650 students registered in the Theory and Practice II Teacher Education Program in the School of Education at Oregon State University during the Fall, Winter and Spring terms of the 1973-74 school year. The School of Education is one of 13 schools within the University, and serves approximately 14 percent of all undergraduate students enrolled in the University. Theory and Practice II was a two-term program designed primarily for sophomores, providing the students a field experience for one term on a half-day basis, five days a week and one term on a half-day basis, five days a week in an on-campus, content-oriented experience. Theory and Practice II was followed by Theory and Practice III for students primarily of junior status and Theory and Practice IV, which was equivalent to the traditional student teaching.

The investigation's sample consisted of 50 students selected at random Winter Term from the 270 students participating in the program Fall and Winter Terms of 1973-74. Ten School of Education faculty members of Theory and Practice II, Block "A" were assigned to
the 270 students in five teams consisting of two faculty members and approximately 50 students each. Hence, each faculty member was assigned to field-supervise 25 students Fall Term and the on-campus instruction of the same 25 students during the Winter Term.

Designation of the eventual 25 students to participate in each of the control and experimental groups was determined in the following randomizing fashion. First, by random selection, two of the five teams comprising Block "A" were selected. Second, by the flip of a coin, the team from which the eventual 25 students to participate in the experimental group was designated; hence, the 25 students to participate in the control group would come from the team losing the coin flip. Finally, since each team was comprised of two faculty members assigned to 25 students each, a coin flip was again used to determine which 25 students from the team's total was to be in the experimental and control groups respectively.

T and P II Block "A" Fall-Winter 1973-1974

![Figure 1](image-url)

Figure 1.
Experimental Design

During the first week of classes Winter Term a pre-test was administered to 25 experimental group students assigned to Instructor #1, Team I of Block "A" and to 25 control group students assigned to Instructor #6, Team II of Block "A", Theory and Practice II. The pre-test consisted of 30 objective items (see Appendix C) testing the ability to recall knowledge, comprehend information, and apply knowledge of linguistic foundations and cultural diversity. The 30 objective items consisted of ten items at each of the Knowledge, Comprehension and Application levels of the cognitive domain as defined by Bloom (1956) in Taxonomy of Educational Objectives. Handbook I: Cognitive Domain.

Experimental Group

Two weeks prior to the end of the Winter Term 1974, the 25 experimental group students received "Linguistic Foundations and Cultural Diversity: An Instructional System" (see Appendix B). After being given approximately one and one-half weeks to complete this self-instructional system, and approximately nine weeks from the time of pre-test administration, the students were administered the post-test, consisting of the same 30 objective items contained on the pre-test. Only the order of the items and the order of the responses differed to control for test wiseness (see Appendix D). All pre- and post-test items were drawn from the self-test items contained in the instructional materials.
The design concept is illustrated in Figure 2. It consists of a pre-test and an identical post-test administered to students who have used the instructional system.

![Diagram](image)

**Figure 2**

**Control Group**

The 25 control group students were administered the same pre- and post-tests as the experimental group on the same dates. However, the control group did not receive, "Linguistic Foundations and Cultural Diversity: An Instructional System."

Table 1 describes participation of all experimental and control subjects in the planned experimental treatment Winter Term, 1974.

**TABLE 1. Participation of all subjects, Winter Term.**

<table>
<thead>
<tr>
<th>Participation</th>
<th>Experimental Participants</th>
<th>Control Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Use of &quot;Linguistic Foundation and Cultural Diversity: Instructional System:&quot;</td>
<td>Yes</td>
<td>no</td>
</tr>
<tr>
<td>Post-Test</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
As described by the review of literature in Chapter II, there is a need for more knowledge about linguistics and language as it relates to the education of culturally diverse students on the part of teachers. That need is particularly apparent in the area of teacher education. For that reason, an instructional system to provide potential teachers with that knowledge was developed (see Appendix B).

It was first necessary to determine what content should be included in such materials in order to provide potential teachers with the necessary foundation on which to proceed. Through review of pertinent literature and consultation with two linguistic experts at Oregon State University, the following content areas were designated: 1) Introduction to Language and Linguistics, 2) Language Acquisition, 3) Language Change, Variation and Relatively, 4) Registers: school and non-school, and 5) Bilingualism.

The instructional system was developed on the following format: 1) each of the five content areas were proceeded by stated behavioral objectives, 2) content was presented in a dialogue or situational context to maintain the student's interest and provide a foundation from which the student could extrapolate, 3) a comprehensive bibliography was provided at the end of each content section, 4) self-test or evaluation questions covering all six levels of the cognitive domain was provided for the student at the end of each content section, 5) a key providing the correct responses to the self-test
was located on the page following the self-test items. The student could then check answers, and review the material he found difficulty with by the refocus page provided at the end of each section.

By this systematic approach the student knew the objectives before studying the material, could test and evaluate himself, refocus on needed information and complete the original objectives. Thus, the instructional system formed a cycle, theoretically ending in mastery of the material.

The systematic approach is illustrated in Figure 3. It consisted of objectives, instruction, evaluation, refocus and if necessary, review instruction.

Figure 3.
Measuring Instrument

The instrument used in this investigation was designed and developed specifically for the needs of the study. That is, the instrument used was developed around the classes specified by Bloom's Taxonomy of Educational Objectives. Handbook I: Cognitive Domain (1956). As stated by Bloom (1956) and validated by Kropp and Stoker (1966) and Smith (1972), the Taxonomy of Educational Objectives: Cognitive Domain was formulated as a valid hierarchy, and did function as a valid evaluative instrument of a subject's cognitive behavior regardless of the content area being evaluated, given that the test designer had knowledge of the experiential background the subjects bring to the test situation and a strict adherence was held to the criteria which defined a question at any level on the taxonomy. Bloom (1956) stated that, "the classification should be a purely descriptive scheme in which every type of educational goal can be represented in a relatively neutral fashion". (p. 14)

Since the taxonomy was considered "content neutral", it was necessary to design an instrument which would evaluate a subject's cognitive abilities in relation to linguistic foundations and cultural diversity. Kropp and Stoker (1966) found difficulty in securing consensus among the experts designing the four tests used in their three-year study as to what level on the taxonomy an item should be. Kropp and Stoker (1966) found more difficulty in designating items at the upper levels of the taxonomy (analysis, synthesis, evaluation) and a greater degree of consensus and validity at the
levels of Knowledge, Comprehension and Application. Whereas Kropp and Stoker found the major levels of the taxonomy to form a valid hierarchy, they found no such validity with the sub-levels. Bloom (1956) says, "although we have little difficulty in determining the major class within which a behavior falls, we still are not satisfied that there are enough clearly defined subclassifications to provide adequately for the great variety of objectives we have attempted to classify." (p. 21) For these reasons, the following methodology was used for instrument construction. First, it was decided to use items from the Knowledge, Comprehension, and Application levels of the taxonomy (ten items at each level for a total of 30). Second, because of the difficulty of obtaining inter-judge consensus on the level at which an item would be judged, the writer designed each test item to correlate with a specific page, as provided Bloom (1956) in terms of item formulation and appropriate context in which the item was being administered. It was possible, then, to direct a judge to a specific page and illustrative test item in Bloom's Taxonomy (1956) to verify the level of the taxonomy the item purported to illustrate.

Each experimental and control group participant received a total number-correct score on the 30 item pre- and post-tests. Since items were not being evaluated separately and only total-number-correct scores evaluated, the measuring device provided interval data.
Because of difficulties found in previously reviewed studies with inter-judge consensus of an item's taxonomic level, it was found prudent to obtain a three-judge committee's validation of the taxonomic levels and content factuality of the 30 items on the measurement instrument. The committee was comprised of one linguistics expert from the Department of Anthropology at Oregon State University and two members of the School of Education faculty at Oregon State University. All three committee members were provided the evaluative instrument, a copy of *Taxonomy of Educational Objectives. Handbook I: Cognitive Domain*, and an indication of the specific illustrative test item each item on the evaluative instrument was correlated with. The linguistic expert was responsible for a judgment on content factuality and taxonomic level of the items and the members from the School of Education were responsible only for judgment of the item's taxonomic level.

Whereas each judge was expected to have an acceptable level of knowledge of Bloom's Taxonomy: Cognitive Domain, it was expected that each item receive a positive consensus on its taxonomic level. Any item not receiving a consensus vote in agreement with its purported taxonomic level was necessarily thrown out or rewritten.

The three judges came to a positive consensus that all thirty test items were representative of the cognitive domain in general and the class of the hierarchy they purported to be. The linguistic expert from the Department of Anthropology also validated the
factuality of the items. Thus, all thirty items were judged appropriate for the study.

**Pilot Study**

Because this investigation was designed to evaluate the effectiveness of a newly developed instructional system, and that the system's effectiveness itself was being evaluated by a newly developed instrument, it was necessary that both the system and evaluative procedure receive a pilot study. For that reason the pre-test, instructional system and post-test were administered to a class of 34 anthropology students in a beginning linguistic course during the Fall Term of 1973.

On the basis of information obtained from the pilot study, typographical errors, ambiguous or poorly formulated statements and incorrect responses to self-test items included on the answer key were discovered in the instructional system materials. In addition, two questions included on the pre-test were discovered to be incomplete and one item ambiguous enough to cause all participants to provide an incorrect response. Because of the administration of a pilot study, the investigation was assured greater validity.
Treatment of Data

As stated in Chapter I, this investigation was designed to test two hypotheses. For the purposes of this chapter the hypotheses will be stated followed by the chosen statistical analysis and a synopsis the data which that analysis provided. Hypothesis 1 was as follows:

1. There will be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity of those students using the Instructional System of Linguistic Foundations and Cultural Diversity as compared with control group students not receiving the instructional system.

Statistical Analysis:

The Analysis of Covariance utilized the F test. As Courtney and Sedgwick (1969) described it, the analysis of covariance made use of both analysis of variance and regression. The present problem was involved with covariance analysis as it was used to adjust treatment means of the dependent variable for differences in the independent variable. For this study, the Pre-test score was considered as the covariant (independent) factor and the Post-test score was the dependent variable. If the computed F value generated by the analysis of covariance was greater than the tabular F value at the .05 level of significance the hypothesis was retained. If the computed F value was less than the tabular F value, the hypothesis was rejected.
Hypothesis 2 was as follows:

2. Ninety percent of those students using the Instructional System of Linguistic Foundations and Cultural Diversity will complete cognitive evaluative test items as defined by Bloom's Taxonomy of Educational Objectives, with ninety percent accuracy.

Statistical Analysis:

Simple arithmetic provided data indicating if experimental students operated at a level of 90% accuracy.

To support the 90/90 percent attainment of objectives as measured by test items, Walbesser and Carter (1968) state:

Observe that the research hypothesis calls for something less than 100 percent of the children acquiring less than 100 percent of the described behaviors. Why? The answer is that 100 percent acquisition by all children was considered unrealistic for a curriculum which is to cover seven years of instructional materials. Individual differences in acquisition contributed to this decision. The mobility of subjects into classes without prior exposure to the curriculum also contributed to making the decision. It was conjectured that under these constraints the 90/90 level of attainment would provide an acceptable indicator of success. (p. 56)

Walbesser and Carter's (1968) "90 to 90" level of attainment was used as the level indicative of success because it was more stringent than others suggested in the review of literature.
IV. FINDINGS

This chapter deals with three areas related to the findings of the investigation; (1) purpose of the study, (2) statement of the two hypotheses tested, (3) statistical analysis used for each hypothesis and the findings of each.

Purpose of the Study

The purpose of this investigation was to determine if an Instructional System in Linguistic Foundations and Cultural Diversity designed for the Theory and Practice II program in the School of Education at Oregon State University would produce a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills of students following the use of the system.

Hypotheses Tested

\( H_1 \) There will be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity of those students using the Instructional System of Linguistic Foundations and Cultural Diversity as compared with control group students not receiving the instructional system.
H₂ Ninety percent of those students using the Instructional System of Linguistic Foundations and Cultural Diversity will complete cognitive evaluative test items as defined by Bloom's Taxonomy of Educational Objectives, with ninety percent accuracy.

Statistical Analysis and Findings

Hypothesis 1: The analysis of covariance was used and utilized the F test. The analysis of covariance made use of both analysis of variance and of regression. The present problem was involved with covariance analysis as it was used to adjust treatment means of the dependent variable for the difference in the independent variable. For this study, the pre-test score was considered as the covariant (independent) factor and the post-test was the dependent variable for the study. If the computed F value generated by the analysis of covariance was found to be greater than the tabular F value at the .05 level of significance, the hypothesis was retained. If the computed F value was found to be less than the tabular F value, the hypothesis was rejected.

The analysis of covariance results are shown in Table 3. The computed F value generated by the analysis of covariance was 216.88 and the tabular F value at the .05 level of significance was 4.05. Since the computed F value was larger than the tabular F value, H₁ was retained. Df = 1,46 on the F table was used because df = 1,47 was not available on the table and df = 1,46 is more stringent than df = 1,48.
Because the hypothesis was retained, it can be assumed that there was a significant difference between the mean scores of the experimental and control group (see Table 2). The experimental groups adjusted mean score on the post-test was 26.74256 and was found to be significantly higher than the control group's adjusted mean score of 18.45744 on the post-test. Additionally, the experimental group experienced a unadjusted mean gain of 7.56 from pre-test to post-test, whereas the control group experienced an unadjusted mean gain of .08 from pre to post test. It was assumed that the experimental treatment was effective in causing the significant mean score differences to occur.

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean X*</th>
<th>Mean Y**</th>
<th>Adjusted Mean Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>19.72</td>
<td>27.28</td>
<td>26.74256</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>17.84</td>
<td>17.92</td>
<td>18.45744</td>
</tr>
</tbody>
</table>

*X Factor is pre-test.

**Y Factor is post-test.
TABLE 3. Analysis of Covariance.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>XX*</th>
<th>XY</th>
<th>YY</th>
<th>df</th>
<th>Adjusted SS**</th>
<th>MS***</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Exp./Cont.</td>
<td>1</td>
<td>44.18</td>
<td>219.96</td>
<td>1095.12</td>
<td>1</td>
<td>771.998192</td>
<td>771.998192</td>
<td>216.88</td>
</tr>
<tr>
<td>Error (within)</td>
<td>48</td>
<td>396.40</td>
<td>226.64</td>
<td>296.88</td>
<td>47</td>
<td>167.299552</td>
<td>3.559565</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>440.58</td>
<td>446.60</td>
<td>1392.00</td>
<td>48</td>
<td>939.297744</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Factor X is pre-test; Factor Y is post-test
Pre-test was used as the covariant.

** SS = Sum of Squares
*** MS = Mean Square

Tabular F
\[ a = 0.05 \]
\[ df = 1,46 = 4.05 \]

\[ H_1: \mu \text{ Exp.} > \mu \text{ Cont. Retained} \]
Hypothesis 1 stated that there would be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity. That significance was hypothesized for the student's behavior at the knowledge, comprehension and application levels of Bloom's Taxonomy of Educational Objectives: Cognitive Domain.

To gather additional data beyond that provided by the analysis of covariance, the percent of correct responses at each of the three levels by the experimental and control groups on the pre and post-tests was computed.

The pre and post-tests were comprised of ten items at each of the knowledge, comprehension, and application levels of Bloom's Taxonomy. Tables 4 and 5 show the percent of correct responses at each level for the pre and post-tests for the two groups. The percentage of correct responses was tabulated in the following manner. Each group had twenty-five participants responding to ten items at each level. Thus, the total possible was 250. The percentage was computed by dividing the actual number of correct responses by 250 possible responses.

Table 4 shows that the Experimental group scored forty-eight percent at the knowledge level on the pre-test and eighty-eight percent on the post-test for a gain of forty percent. A score of seventy-six percent was attained on the pre-test at the comprehension level and ninety-three percent on the post-test for a gain of seventeen percent. A score of seventy-two percent was attained on
the pre-test at the application level and ninety percent on the post-test for a gain of eighteen percent. The experimental group showed a gain at all three-levels.

TABLE 4. Experimental Group Percent Scores at Knowledge, Comprehension and Application Levels of Cognitive Domain.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test %</th>
<th>Post-Test %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>48%</td>
<td>88%</td>
</tr>
<tr>
<td>Comprehension</td>
<td>76%</td>
<td>93%</td>
</tr>
<tr>
<td>Application</td>
<td>72%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Table 5 shows that the control group scored forty-six percent at the knowledge level on the pre-test and fifty-two percent on the post-test for a gain of six percent. A score of sixty-six percent was attained on the pre-test at the comprehension level and sixty-seven percent on the post-test for a gain of one percent. A score of sixty-five percent was attained on the pre-test at the application level and sixty percent on the post-test for a loss of five percent.

TABLE 5. Control Group Percent Scores at Knowledge, Comprehension, and Application Levels of Cognitive Domain

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test %</th>
<th>Post-Test %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>46%</td>
<td>52%</td>
</tr>
<tr>
<td>Comprehension</td>
<td>66%</td>
<td>67%</td>
</tr>
<tr>
<td>Application</td>
<td>65%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Hypothesis 2: The percentage of correct responses was attained by dividing the number of correct responses by the total number of test items. The percentage of students operating at any one percentage level was attained by dividing the number of students operating at that level by the total number of students in the group.

Eighteen of the twenty-five experimental group students attained a score of twenty-seven or better out of the thirty possible post-test items, hence seventy-two percent of the group scored ninety percent or better. \( H_2 \) was therefore rejected. Ninety percent of the experimental group students did not complete ninety percent of the cognitive evaluative test items with ninety percent accuracy.

Tables 6 and 7 provide data showing the attainments of the experimental and control groups on the post-test. Although the experimental group did not reach the level set by \( H_2 \), eighty-eight percent of the experimental group did complete the post-test with eighty-seven percent accuracy.

<table>
<thead>
<tr>
<th>No. of Participants</th>
<th>% of Participants</th>
<th>% Correct Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>100%</td>
<td>83% or above</td>
</tr>
<tr>
<td>22</td>
<td>88%</td>
<td>87% or above</td>
</tr>
<tr>
<td>18</td>
<td>72%</td>
<td>90% or above</td>
</tr>
<tr>
<td>10</td>
<td>40%</td>
<td>93% or above</td>
</tr>
<tr>
<td>6</td>
<td>24%</td>
<td>97% or above</td>
</tr>
<tr>
<td>1</td>
<td>0.04%</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 6 shows the experimental group's post-test scores to have a range from a low score of eighty-three percent accuracy to a high score of one hundred percent accuracy. Whereas Table 7 shows the control group's post-test scores to have a broader range of a low score of forty-three percent accuracy to a high score of seventy-seven percent accuracy.

When comparing the experimental and control group's percentages it was found that the experimental group's lowest percentage of correct responses was higher than the control group's highest response. Additionally, the experimental group had a range of 17% whereas the control group had a range of 34%.

Individual Experimental group students pre and post-test scores can be found in Appendix E. Individual Control group student's pre
and post-test scores can be found in Appendix F. In each case the student's identification number, pre-test, post-test score and difference between pre and post-test scores are provided.
V. SUMMARY, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This chapter deals with (1) a summary of the nature of the problem and purpose of the study, review of related literature, design of the study and findings of the study, (2) discussion of the findings, (3) implications of the study, and (4) recommendations for further study.

Nature of the Problem and Purpose of Study

The problem focused around the necessity for providing teachers with a foundational knowledge of linguistics and cultural diversity as they relate to educating children. Important in this problem was the exploration of what that foundational knowledge consisted of, where it could be found, and how to best provide it to potential teachers.

The discipline of anthropology offered the best focus for foundational knowledge of language, linguistics and cultural diversity related to education. Linguistic experts and writers in the field suggested five content areas should be included as foundational knowledge. The areas were (1) Introduction to Linguistics and Cultural Diversity, (2) Language Acquisition, (3) Language Variation, Change and Relativity, (4) Registers, and (5) Bilingualism.

The instructional systems technique was chosen as the vehicle to present the content. This technique was chosen because it provided a procedure by which the content to be learned was focused, instructional content provided, and the learners accomplishments
of the original objectives was evaluated. If the objectives were not accomplished, the procedure allowed the learner to refocus until the objectives were accomplished. The techniques' procedure formed an instructional cycle, theoretically ending in the student's acquisition of foundational knowledge of linguistics and cultural diversity.

Bloom's Taxonomy of Educational Objectives: Cognitive Domain was used to construct the system so its objectives could be accomplished. The taxonomy divided cognitive behaviors into broad levels in a hierarchical order. The levels began with (1) knowledge and included (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation. The research reviewed validated the hierarchical structure of the major levels of the taxonomy. Bloom's method aided in the specification of objectives so that it was possible to plan instructional experiences in a progression from the lowest level of recall, to the highest level evaluation. The taxonomy also aided in the preparation of the evaluation devices for the instructional system.

The primary purpose of the study was to determine if the Instructional System in Linguistic Foundations and Cultural Diversity would produce a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills of students using the system. To determine if that process of successful instruction had taken place it was necessary to find out if the users of the system could recall, comprehend and apply the content provided.
Review of Related Literature

The review of literature and research related to six areas: (1) need for, and use of a knowledge of linguistics in public education; (2) linguistics in teacher education programs, (3) written materials in linguistics and cultural diversity available for teacher education; (4) instructional systems, (5) competency and performance-based approaches to teacher education; and (6) Bloom's Taxonomy of Educational Objectives: Cognitive Domain. This summary follows that order of presentation.

There was general agreement among the writers that a knowledge of linguistics and the functions of language was important to education, particularly in the education of culturally diverse children. There was also general agreement that such knowledge does not exist on the part of most educators.

Additionally, much of the failure of educational institutions to provide a productive education for culturally diverse children was directly tied to the lack of communication generated by an inadequate understanding of language patterns and cultural diversity.

Authors agreed that teachers lack of knowledge about behaviors culturally related to language and their ensuing attitudes about the education of culturally diverse children was related to the unrealistic instruction the teachers received in their professional preparation.
A study by Makely (1969) showed that teachers who had received linguistics and cultural diversity instruction in their professional preparation operated with a higher level of competence and confidence when teaching culturally diverse children. Such professional instruction married foreign language teaching techniques with standard-English as a second dialect instruction, as a methodology for the teaching of students who speak nonstandard varieties of English.

All of the studies reviewed indicated there was a glaring lack of linguistics and cultural diversity courses or substantial foundational input in most of the teacher education institutions of the country. Very few institutions dealt with nonstandard or urban language in their course work.

There are a good number of books, periodicals, journals and papers in the field of linguistics and cultural diversity. Although many of the materials deal with one or more of the foundational concept areas experts believe necessary for teacher education, no single publication or set of materials could be discovered that dealt with all the necessary conceptual areas. There was a gulf between the content and its application to a classroom. Most of the material was specific, technical and unsuitable for students without some previous knowledge of linguistics and cultural diversity.

Writers consistently agreed that instructional systems were designed to bring about specified and measurable outcomes, were designed so that evidence of the system's effectiveness was continually available and were designed to be adaptive or corrective.
Writers such as Robinson (1972) and Schalock (1969) stated that instructional systems were effective because of their "systemic" construction. The following were the components of the process: (1) what was to be accomplished was known, (2) events were ordered so there was a probability of accomplishing it, (3) assessment of whether events accomplished what they were intended to, and (4) if they didn't, the events were refocused until they did.

Authors noted that the instructional systems technique was increasingly being employed to actualize competency-based teacher education programs in which the competencies to be acquired by the student and the criteria for success were made explicit and the student was held accountable for meeting the criteria. The systems approach made the realization of the objectives of competency-based programs have a greater probability.

Garrison (1968) and Kropp and Stoker (1966) stated that many of the programs they had reviewed made use of Bloom's Taxonomy of Educational Objectives: Cognitive Domain as a vehicle to define and order the complexity of their objectives, and as a method to evaluate the commission of those objectives. There was consensus among the authors reviewed that the Taxonomy of Educational Objectives: Cognitive Domain served as a valuable tool in the development of curriculum and instruction.
Design of the Study

The investigation's population consisted of approximately 650 students registered in the Theory and Practice II Teacher Education Program in the School of Education at Oregon State University during the 1973-1974 school year.

The sample consisted of twenty-five control group and twenty-five experimental group participants selected at random from the 270 students during the winter term.

During the first week of the winter term a pre-test was administered to the control and experimental group. The pre-test consisted of thirty objective items testing the ability to recall knowledge, comprehend information, and apply knowledge of linguistic foundations and cultural diversity. The thirty objective items consisted of ten items at each of the knowledge, comprehension and application levels of the cognitive domain as defined by Bloom's Taxonomy of Educational Objectives, Handbook I: Cognitive Domain.

Two weeks prior to the end of the winter term, the experimental group received the treatment "Linguistic Foundations and Cultural Diversity: An Instructional System." At the end of the term the control and experimental groups were administered the post-test, consisting of the same items as the pre-test, but changing the order of presentation and order of possible responses.
A three-judge validation committee came to a positive consensus that all thirty test items were factual and representative of the hierarchical classification of the cognitive domain. Additionally, the materials and instruments were tried in a pilot study fall term of 1973 to revise the materials and thus, assure greater validity.

The treatment of data was designed to explore the two hypotheses of the investigation. Hypothesis 1 stated that:

There will be a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity of those students using the Instructional System of Linguistic Foundations and Cultural Diversity as compared with the control group students not receiving the instructional system.

The statistical analysis chosen to provide data on the hypothesis was the Analysis of Covariance. For this study, the pre-test score was considered the covariant factor and the post-test score was the dependent variable. If the computed F value generated by the analysis of covariance was greater than the tabular F value at the .05 level of significance the hypothesis was retained.

Hypothesis 2 was as follows:

Ninety percent of those students using the Instructional System of Linguistic Foundations and Cultural Diversity will complete cognitive evaluative test items as defined by Bloom's Taxonomy of Educational Objectives with ninety percent accuracy.

Simple arithmetic percentage tabulation provided data indicating whether or not ninety percent of the students operated at a level of ninety percent accuracy.
Findings

Hypothesis 1 was retained. There was a significant increase in the recall or recognition of knowledge and development of intellectual abilities and skills related to Linguistic Foundations and Cultural Diversity by the experimental group as compared to the control group.

The computed $F$ value generated by the analysis of covariance was 216.88 and the tabular $F$ value at the .05 level of significance was 4.05. The computed $F$ value was greater than the tabular $F$ value and therefore $H_1$ was retained. The experimental group's adjusted mean score on the post-test was 26.74256 and was significantly higher than the control group's adjusted mean score of 18.45744. The experimental group experienced an unadjusted mean gain of 7.56 from pre-test to post test, whereas the control group experienced an unadjusted mean gain of .08. The experimental treatment was judged effective in causing the significant mean score differences to occur.

Hypothesis 2 was rejected. Ninety percent of the experimental group students did not complete the cognitive post-test items with ninety percent accuracy. However, seventy-two percent of the experimental group completed the post-test with ninety percent accuracy and eighty-eight percent achieved an eighty-seven percent level of accuracy. Although $H_2$ was rejected, the high level of experimental group achievement would indicate the instructional system was effective.
Discussion

Beyond the retention of hypothesis 1 and rejection of hypothesis 2, the data gathered in this investigation provided some interesting observations and possible speculations. The experimental group did not meet the "ninety at ninety" level set for retention of hypothesis 2, but eighty-eight percent did score at the eighty-seven percent level and no participant scored less than eighty-three percent. The unadjusted mean score for the experimental group was at the ninety percent level and the mode of percent scores was also ninety percent. Payatte (1972) stated that the level for a system's success should be set at the eighty percent level. Walbesser and Carter's (1968) ninety percent at ninety percent was selected for this study because it set a stringent standard to test against. The high level attained by the experimental group showed the instructional system to be effective.

Some high scores were attained by persons in both the control and experimental groups that are difficult to account for. Two members of the experimental group obtained scores of eighty percent on the pre-test. To explore possible influences resulting in the participants high scores, major academic backgrounds were investigated and it was discovered that both participants were majoring in the social sciences, which might have provided some background useful for the test. Both participants scored higher on the post-test, one at ninety-seven percent and the other at the one hundred percent level.
Two members of the control group attained a seventy-seven percent level of accuracy on the post test. Both had scored high on the pre-test, at seventy percent and seventy-three percent, respectively. The members of the control group with high pre-test scores showed little gain to the post-test, whereas the experimental group participants who scored highest on the pre-test showed a seventeen to twenty percent increase.

In both the experimental and control groups, the higher scoring participants have academic background in the social sciences, English and foreign languages.

The pre and post-tests were developed with ten items at each of the knowledge, comprehension, and application levels of the cognitive domain. On the basis of the hierarchical structure of the taxonomy, one might expect that the items at the knowledge level would receive the highest percent of correct responses and the comprehension and application levels would receive lower percents, respectively. Tables 4 and 5 in chapter four show such was not the case.

Both the control and experimental groups scored lowest on items at the knowledge level and highest on items at the comprehension level. It can only be speculated why these scores were attained. The control group did not have the benefit of the instructional system. Without an understanding of the terminology involved, items at the knowledge level were difficult to respond to. Items at the higher levels provided more information within the formulation of the questions that the participants could be familiar with, and might have provided cues resulting in a better possibility for a correct response.
The experimental group's higher pre-test scores at the comprehension and application levels might have also resulted from cues or familiar information imbedded in those questions.

Both the experimental and control groups had a higher percentage of correct responses at the comprehension level than at the application level, which would tend to support the taxonomy's hierarchy. However, the low percentage scored by the experimental group on items at the knowledge level on the post-test can not be accounted for. An explanation might lie in the fact that many of the knowledge items ask for recall of definitions of terms such as language, linguistics, grammar and school or non-school register, which could be very different definitions from those the students had learned or been taught in their schooling or home life.

It was not the intent of this study to investigate attitudes of students toward the system; however, when the experimental group received the instructional system they were asked to provide a critique of the materials at the time when they were returned. Short paragraphs of critique are provided in Appendix G.

Generally, students responded that the instructional system was of value to them. Comments were registered such as "I learned a great deal from going over this learning material. I now understand many cultural diversity relationships in language I never was aware of before", and "I felt I learned a lot of things I had never thought about. My awareness was increased by the material". One person commented, "this was a real eye-opener. As an English major, it was particularly interesting."
On the whole, the critiques would indicate that the students felt the instructional system was useful, and they benefited from the experience and the content presented.

Additionally, Black educators with backgrounds from urban settings in Illinois, Florida, North Carolina, California and Washington were asked to read the instructional system and respond. The opinions expressed indicated that the materials were factual, would be useful and needed in teacher preparation.

Implications

The following implications are presented on the basis of information drawn from this study. In some cases the study reaffirms implications generated by previous studies, and in other cases the implication is inherent to the information gathered in this investigation.

1. Most potential teachers do not have a foundational knowledge of language, linguistics and their relationship to cultural diversity and education.

2. Most current teacher education curriculums do not provide foundational knowledge in linguistic foundations and cultural diversity to potential teachers.

3. Successful instruction of linguistic foundations and cultural diversity can be accomplished through the process of determining necessary content, and
presenting that content through the combination of
the instructional systems technique and the developmental method of Bloom's Taxonomy.

4. "Linguistic Foundations and Cultural Diversity: An Instructional System" can serve as an effective input in the development of teacher education curriculum through the procedure of setting objectives, presenting content, evaluating learner's accomplishment of objectives and refocusing instruction until the learners have accomplished the objectives set by the system.

Recommendations for Further Study

The Instructional System of Linguistic Foundations and Cultural Diversity was developed to provide instruction to prospective teachers. The study dealt with cognitive development brought about by the organization of the content into a system and was investigated with caucasian students participating in a field and campus-based program in a city with a predominately caucasian population.

The following recommendations are generated from information gained from the process of investigation. Additionally, it is understood that the necessary limiting parameters of the study provided useful, but focused findings.
1. This investigation covered a time-span of approximately ten weeks. Longitudinal studies are recommended that would investigate student's retention of outcomes and learnings after the use of the instructional system and its effect on their further professional preparation.

2. Teacher's behaviors are intimately involved not only with what they know, but also upon what they value. Therefore, to gain further information on the system's effectiveness, it is recommended that further studies investigate the affective development effected by the use of the system.

3. This investigation dealt with caucasian undergraduate education students operating in a predominately caucasian environment. It is recommended that further studies investigate the instructional system's effectiveness in a field-based teacher education program in a multicultural setting.

4. Research indicates that certified teachers in multicultural settings do not have a foundational knowledge of linguistic and cultural diversity. The Instructional System has been found effective with potential teachers. It is recommended that this investigation be replicated with certified teachers training culturally diverse children.


Houston, Robert. 1972. Performance education: Strategies and resources for developing a competency-based teacher education program. Albany, the University of the State of New York, the State Education Department. 137 p.


Leaverton, Lloyd. 1971a. Dialectal Readers - rational, use and value. Speech presented. 11 p. (Educational Resources Information Center no. ED 060 701) (Microfiche)


Schalock, Del. 1972. The focus: Knowledge, teaching behavior, or the products? In: Performance-based certification of school personnel. Edited by Joel Burdin and Margaret Reagan. p. 42-49. (Educational Resources Information Center no. ED 049 152)


APPENDIX A

Condensed Version of the
Taxonomy of Educational Objectives

Cognitive Domain

KNOWLEDGE

1.00 KNOWLEDGE

Knowledge, as defined here, involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material. Although some alteration of the material may be required, this is a relatively minor part of the task. The knowledge objectives emphasize most the psychological processes of remembering. The process of relating is also involved in that a knowledge test situation requires the organization and reorganization of a problem such that it will furnish the appropriate signals and cues for the information and knowledge the individual possesses. To use an analogy, if one thinks of the mind as a file, the problem in a knowledge test situation is that of finding in the problem or task the appropriate signals, cues, and clues which will most effectively bring out whatever knowledge is filed or stored.

1.10 KNOWLEDGE OF SPECIFICS

The recall of specific and isolable bits of information. The emphasis is on symbols with concrete referents. This material, which is at a very low level of abstraction, may be thought of as the elements from which more complex and abstract forms of knowledge are built.

1.11 KNOWLEDGE OF TERMINOLOGY

Knowledge of the referents for specific symbols (verbal and non-verbal). This may include knowledge of the most generally accepted symbol referent, knowledge of the variety of symbols which may be used for a single referent, or knowledge of the referent most appropriate to a given use of a symbol.

*To define technical terms by giving their attributes, properties, or relations.

*Familiarity with a large number of words in their common range of meanings.
1.12 KNOWLEDGE OF SPECIFIC FACTS

Knowledge of dates, events, persons, places, etc. This may include very precise and specific information such as the specific date or exact magnitude of a phenomenon. It may also include approximate or relative information such as an approximate time period or the general order of magnitude of a phenomenon.

*The recall of major facts about particular cultures.
*The possession of a minimum knowledge about the organisms studied in the laboratory.

1.20 KNOWLEDGE OF WAYS AND MEANS OF DEALING WITH SPECIFICS

Knowledge of the ways of organizing, studying, judging, and criticizing. This includes the methods of inquiry, the chronological sequences, and the standards of judgment within a field as well as the patterns of organization through which the areas of the fields themselves are determined and internally organized. This knowledge is at an intermediate level of abstraction between specific knowledge on the one hand and knowledge of universals on the other. It does not so much demand the activity of the student in using the materials as it does a more passive awareness of their nature.

1.21 KNOWLEDGE OF CONVENTIONS

Knowledge of characteristic ways of treating and presenting ideas and phenomena. For purposes of communication and consistency, workers in a field employ usages, styles, practices, and forms which best suit their purposes and/or which appear to suit best the phenomena with which they deal. It should be recognized that although these forms and conventions are likely to be set up on arbitrary, accidental, or authoritative bases, they are retained because of the general agreement or concurrence of individuals concerned with the subject, phenomena, or problem.

*Familiarity with the forms and conventions of the major types of works, e.g., verse, plays, scientific papers, etc.
*To make pupils conscious of correct form and usage in speech and writing.

1.22 KNOWLEDGE OF TRENDS AND SEQUENCES

Knowledge of the processes, directions, and movements of phenomena with respect to time.

*Understanding of the continuity and development of American culture as exemplified in American life.
*Knowledge of the basic trends underlying the development of public assistance programs.
1.23 **KNOWLEDGE OF CLASSIFICATIONS AND CATEGORIES**

Knowledge of the classes, sets, divisions, and arrangements which are regarded as fundamental for a given subject field, purpose, argument, or problem.

*To recognize the area encompassed by various kinds of problems or materials.*  
*Becoming familiar with a range of types of literature.*

1.24 **KNOWLEDGE OF CRITERIA**

Knowledge of the criteria by which facts, principles, opinions, and conduct are tested or judged.

*Familiarity with criteria for judgment appropriate to the type of work and the purpose for which it is read.*  
*Knowledge of criteria for the evaluation of recreational activities.*

1.25 **KNOWLEDGE OF METHODOLOGY**

Knowledge of the methods of inquiry, techniques, and procedures employed in a particular subject field as well as those employed in investigating particular problems and phenomena. The emphasis here is on the individual's knowledge of the method rather than his ability to use the method.

*Knowledge of scientific methods for evaluating health concepts.*  
*The student shall know the methods of attack relevant to the kinds of problems of concern to the social sciences.*

1.30 **KNOWLEDGE OF THE UNIVERSALS AND ABSTRACTIONS IN A FIELD**

Knowledge of the major schemes and patterns by which phenomena and ideas are organized. These are the large structures, theories, and generalizations which dominate a subject field or which are quite generally used in studying phenomena or solving problems. These are at the highest levels of abstraction and complexity.

1.31 **KNOWLEDGE OF PRINCIPLES AND GENERALIZATIONS**

Knowledge of particular abstractions which summarize observations of phenomena. These are the abstractions which are of value in explaining, describing, predicting, or in determining the most appropriate and relevant action or direction to be taken.

*Knowledge of the important principles by which our experience with biological phenomena is summarized.*  
*The recall of major generalizations about particular cultures.*
1.32 KNOWLEDGE OF THEORIES AND STRUCTURES

Knowledge of the body of principles and generalizations together with their interrelations which present a clear, rounded, and systematic view of a complex phenomenon, problem, or field. These are the most abstract formulations, and they can be used to show the interrelation and organization of a great range of specifics.

*The recall of major theories about particular cultures.
*Knowledge of a relatively complete formulation of the theory of evolution.

INTELLECTUAL ABILITIES AND SKILLS

Abilities and skills refer to organized modes of operation and generalized techniques for dealing with materials and problems. The materials and problems may be of such a nature that little or no specialized and technical information is required. Such information as is required can be assumed to be part of the individual's general fund of knowledge. Other problems may require specialized and technical information at a rather high level such that specific knowledge and skill in dealing with the problem and the materials are required. The abilities and skills objectives emphasize the mental processes of organizing and reorganizing material to achieve a particular purpose. The materials may be given or remembered.

2.00 COMPREHENSION

This represents the lowest level of understanding. It refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.

2.10 TRANSLATION

Comprehension as evidenced by the care and accuracy with which the communication is paraphrased or rendered from one language or form of communication to another. Translation is judged on the basis of faithfulness and accuracy, that is, on the extent to which the material in the original communication is preserved although the form of the communication has been altered.

*The ability to understand non-literal statements (metaphor, symbolism, irony, exaggeration).
*Skill in translating mathematical verbal material into symbolic statements and vice versa.
2.20 **INTERPRETATION**

The explanation or summarization of a communication. Whereas translation involves an objective part-for-part rendering of a communication, interpretation involves a reordering, re-arrangement, or a new view of the material.

*The ability to grasp the thought of the work as a whole at any desired level of generality.
*The ability to interpret various types of social data.

2.30 **EXTRAPOLATION**

The extension of trends or tendencies beyond the given data to determine implications, consequences, corollaries, effects, etc., which are in accordance with the conditions described in the original communication.

*The ability to deal with the conclusions of a work in terms of the immediate inference made from the explicit statements.
*Skill in predicting continuation of trends.

3.00 **APPLICATION**

The use of abstractions in particular and concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods. The abstractions may also be technical principles, ideas, and theories which must be remembered and applied.

*Application to the phenomena discussed in one paper of the scientific terms or concepts used in other papers.
*The ability to predict the probable effect of a change in a factor on a biological situation previously at equilibrium.

4.00 **ANALYSIS**

The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication, to indicate how the communication is organized, and the way in which it manages to convey its effects, as well as its basis and arrangement.

4.10 **ANALYSIS OF ELEMENTS**

Identification of the elements included in a communication.

*The ability to recognize unstated assumptions.
*Skill in distinguishing facts from hypotheses.

4.20 **ANALYSIS OF RELATIONSHIPS**

The connections and interactions between elements and parts of a communication.
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*Ability to check the consistency of hypotheses with given information and assumptions.
*Skill in comprehending the interrelationships among the ideas in a passage.

4.30 ANALYSIS OF ORGANIZATIONAL PRINCIPLES

The organization, systematic arrangement, and structure which hold the communication together. This includes the "explicit" as well as "implicit" structure. It includes the bases, necessary arrangement, and the mechanics which make the communication a unit.
*The ability to recognize form and pattern in literary or artistic works as a means of understanding their meaning.
*Ability to recognize the general techniques used in persuasive materials, such as advertising, propaganda, etc.

5.00 SYNTHESIS

The putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before.

5.10 PRODUCTION OF A UNIQUE COMMUNICATION

The development of a communication in which the writer or speaker attempts to convey ideas, feelings, and/or experiences to others.
*Skill in writing, using an excellent organization of ideas and statements.
*Ability to tell a personal experience effectively.

5.20 PRODUCTION OF A PLAN, OR PROPOSED SET OF OPERATIONS

The development of a plan of work or the proposal of a plan of operations. The plan should satisfy requirements of the task which may be given to the student or which he may develop for himself.
*Ability to propose ways of testing hypotheses.
*Ability to plan a unit of instruction for a particular teaching situation.

5.30 DERIVATION OF A SET OF ABSTRACT RELATIONS

The development of a set of abstract relations either to classify or explain particular data or phenomena, or the deduction of propositions and relations from a set of basic propositions or symbolic representations.
*Ability to formulate appropriate hypotheses based upon an analysis of factors involved, and to modify such hypotheses in the light of new factors and considerations.
*Ability to make mathematical discoveries and generalizations.

6.00 EVALUATION

Judgments about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria. Use of a standard of appraisal. The criteria may be those determined by the student or those which are given to him.

6.10 JUDGMENTS IN TERMS OF INTERNAL EVIDENCE

Evaluation of the accuracy of a communication from such evidence as logical accuracy, consistency, and other internal criteria.
*Judging by internal standards, the ability to assess general probability of accuracy in reporting facts from the care given to exactness of statement, documentation, proof, etc.
*The ability to indicate logical fallacies in arguments.

6.20 JUDGMENTS IN TERMS OF EXTERNAL CRITERIA

Evaluation of material with reference to selected or remembered criteria.
*The comparison of major theories, generalizations, and facts about particular cultures.
*Judging by external standards, the ability to compare a work with the highest known standards in its field -- especially with other works of recognized excellence.
APPENDIX B

LINGUISTIC FOUNDATIONS AND CULTURAL DIVERSITY FOR THE
TEACHER EDUCATION PROGRAM AT OREGON STATE UNIVERSITY:
AN INSTRUCTIONAL SYSTEM
DIRECTIONS

The purpose of these materials is to provide you with knowledge of linguistics as it relates to cultural diversity and education. The material is presented in a systematic method. The purpose of the material and your knowledge will best be served if you follow these directions:

1. Read the **objectives** at the beginning of each section carefully.

2. Read each section of the materials carefully.

3. Complete the **self-test items** at the end of each section before going on to the next, and check your responses by the key provided. If you have any difficulty with a self-test item, go back to the page pertaining to the question and refocus your attention to that material. For essay questions a response will not be provided on the key. Instead, pages are cited which will provide information you can compare your responses against.

The materials are intended to be a self-instructional system. For that reason, you are encouraged to proceed at your own pace. One reminder might be helpful. It is wise to complete the reading and self-test for one section before proceeding to the next.
I. INTRODUCTION TO LINGUISTICS AND CULTURAL DIVERSITY

OBJECTIVES

After reading this section, you should be able to:

- Define linguistics.
- Define language.
- Recognize how language is viewed by most people.
- Comprehend the way language changes.
- Describe what a linguist does in education.
- Apply educational policies of linguistics to the educational well-being of culturally diverse students.
- Illustrate the difficulty of language translation between culturally diverse groups.
- Apply educational theory to linguistic diversity of students.
- Formulate a statement about the significance of linguistics in the education of culturally diverse students.
- Judge a position taken on the way language instruction of culturally diverse students should be approached by teachers.
Introduction

Most people are unaware of the importance of language in everything we do, what we think, what seems to be reality and how we act in relation to that reality. We are born into a language environment that submerges us in a sea of words, always present and mostly unavoidable. During most every moment of our lives, waking or dreaming, from birth to death, we are surrounded by language and its effects. Much of the time we are so unconscious of the place of language in our lives, it is so taken for granted that we overlook its central significance in our every action.

Human existence is welded to language; to be human is a fusion of man as animal and his language. "Without language man cannot perceive in a specific manner, or think, or conceptualize, or exercise his creative potentialities and capacities." (3). Language is the one tool man must master in order to function in the society of men.

Language and the Schools

Everything we do in the schools is dependent upon language, whether it be lexical, numerical or musical. Little Johnny and Mary's success is based upon how well they manipulate or make use of a particular language. Whether speaking, reading, writing, or listening, their success is determined or evaluated by the extent to which they have performed these manipulations.

If language is so central to the process of education, it seems clear that the teachers in the educational enterprise should have as much knowledge about language as it is possible to provide them. It is important that we find out more about language and how it works. Already we know enough about it to realize that it is not as simple as the majority of teachers assume it to be.

What is Linguistics?

It is the intent of these materials to provide you with that knowledge through the presentation of linguistics as an area of content as it relates to cultural diversity.

Linguistics is a way of behaving. It is an activity, a process of doing something. More to the point, it is a way of behaving while you try to find something out about language. "The information and knowledge that result from such inquiry-behavior becomes a part of what is meant by linguistics. But it would be a mistake to define linguistics as a body of specific assertions about language. Facts, or even theories, by themselves are not linguistics, just as facts..."
or theories alone are not science. Science is a pursuit." (8) Linguistics is just such a pursuit, a pursuit of knowledge about language, what it is, how it is acquired, how it works, what and who it effects, and what we need to know about it to help people learn, and to learn ourselves.

If we are to find success in our endeavors, it also becomes apparent just as the scientific attitude stresses adaptability, we must stress adaptability. "Adaptability is a recognition of, and a way of responding to the fact that the world and all that is in it, including knowledge, are not static but are undergoing a continual process of change." (9) To what degree we make ourselves a burden rather than an asset by failing to adapt to cultural diversity is a question each educator must confront. By possessing a knowledge of the foundations of linguistics and adaptability that the knowledge calls for, we might detour the dogmatism and preoccupation with the "rightness" of our "standard" language which has hobbled many "culturally different" students and the process of education alike in the past.

What is Language?

Since linguistics is the process by which we are to come to know about language, it is probably important to provide a general description or parameter of language to work from.

"Language is here treated as a human institution. In this respect, it is viewed from a distinctly sociological perspective. This is a social-scientific way of noting its standardized, organized structural and operational features, as it serves as a basic and universal agency in every community and society." (4) It is an institution, and institutions are sociocultural systems. "System" refers to some orderly combination or arrangements of parts into a whole, which, in turn is more than a chance assembly of parts." (5)

As a social system, language is a constructed, even though not planned, human institution. It is learned by the members of the speech community, firmly established in their communicative behavior, and involved in most of their other behavior. To be sure, no language can or does remain constant. At the same time its forms, meanings, and usages are not erratic or haphazard. In this way every language is a durable, highly organized system, dissectable into structural and functional components. The forms and functions that a language takes have developed across an expanse of time and space, through constant variation, addition, deletion, selection, reorganization and modification of words and grammatical rules. Thus every language is undeniably complex and intricate; its workings putting the finest computer to shame in terms of complexity and ability.
Each language has a set of grammatical rules which sets the standards for speech behavior - behavior which becomes habitual. "Fundamentally, a language is a 'body of speech usages' conducted 'in terms of a set of rules'!" (6) Each language has its essential, regularized rules that allows the speaker to generate an infinite number of sentences, each of which is grammatical, or judged so by his speech community.

Cultural Diversity

Our society, as large and as diverse as it is, can survive only as a result of human cooperation on a greater scale than has been accomplished up to this time. As the primary mediating and communicative force between man, language has to be a prime factor in any cooperative endeavor. Looking at the growing complexity and unfortunate development of divisive trends in our society, it seems that one of the primary changes of our educational system is to develop in its students an improved ability to communicate, assuring a greater social cooperation necessary for continued existence. Needless to say, to this point we haven't accomplished this goal for more than a minority of which we have tried to educate. A minority is not enough.

This material, then, is put together to serve the teacher of cultural and linguistic minorities in a pluralistic America. It attempts to show how the analysis of language and culture will lead to a fuller understanding of the nature and uses of diversity. It will demonstrate in some dimensions what the characteristics of these alternative systems - especially language systems - are. But ultimately it attempts to open the eyes and ears of educators to the possible alternative systems which the young may bring into class. There seems to be no other way of educating those students than to provide them with a sense of dignity in the selves they bring with them to school, and to build on this by demonstrating social, linguistic and cultural alternatives around them.

As educators, our task is no small one. We must find out how to expand the language command of non-standard as well as standard English speakers, for those who have and those who have not, for the "culturally disadvantaged" and the "culturally favored."

The approaches may have to be different; so be it. That is where adaptability is imperative. The central problem, then, is the need for teachers in the mainstream of American society to recognize the integrity, usefulness, and strength inherent in linguistic and cultural diversity, and put this awareness to work in the classroom. (7)
The mistakes of the past can be avoided by developing in ourselves as teachers and our students, a tolerant view about standards of usage, about prestige dialects and the development of varieties of speech.

**Order of Concept Presentation**

In order to provide the most sensible approach possible, linguistics and cultural diversity has been presented in four concept areas. The order of development within this material correlates with the most useful order of presentation for educators, in that each section provides a logical entry to the next. The concept areas to be covered are in order: (1) Language Acquisition, (2) Language Variety, Change and Relativity, (3) Registers: Social and School, and (4) Bilingualism.

One of the difficulties of systematically presenting linguistic content to educators and potential educators is that it is difficult to present the material in such a way that it can be extrapolated beyond theory to its relationship in the world of children, education and schools. The language of linguistics has many times made reading and comprehension a laborious task for practitioners, and implementation of the ideas presented difficult in most school settings, whether urban, suburban or rural.

**Eli**

For interest and clarity of presentation, the linguistic content will be presented primarily in a dialogue form with a fourteen year-old Black student named Eli. Eli speaks the non-standard Black variation of English fluently and will provide the situations and context into which we can place the content of the four concept areas.

Eli is a hypothetical boy, but his situation in life and the schools is very real. In order to acquaint you with the educational environment Eli lives in, the following description of the efforts to get his assistance is presented. The environment described sets the stage for following exploration.

**Eli's School World**

"Amazing", I thought. All that school needs is a few gun implacements and a mote and you could not tell it from a prison or a fort. There was a high wire screen fence around the grounds. It is hard to tell whether it was to keep students in or to keep people out, perhaps both. I wasn't so sure I wanted to go in, but maybe that was just biased liberal reaction to poor educational architecture.
Pushing through the scared doors I noticed a lack of the traditional inscriptions you find on buildings of that period. Instead, painted over the doors and onto the walls were slogans reading "Black Power", "Save for Dog Food" and a new one for me, "Beware, entering Blood's Crib." The first is a pretty common slogan and needs no translation; the other two roughly mean, "save money to bribe cops?" and "Watch out, you're entering a Black's turf." (1)

The hallways weren't in keeping with the exterior of the building for several reasons. Some sharp art teacher had done a pretty good job of selling someone on the idea of allowing the kids to paint the walls with art work and secondly, the kids themselves were very much alive and active.

Two girls ran by me singing a song by Diana Ross and the Supremes just as I heard "Chuck", "Chuck", "Chuck", "Chuck", "Charlie". Hey, Mr. Charlie." "He ain't no Mr. Charlie man, he be an agent," responded another voice. "He sure ain't no cowboy", from another direction. The obvious leader of the group lining the wall settled the issue by "the beast's a fish". Translated, I was taunted, called a white in authority, then not a white in authority, but instead a cop; surely I wasn't a criminal, and finally it was determined I was just a native white. (2)

This seeming harassment on the way down the hall was more a game than anything else. I was on their turf and needed some testing. We call it evaluation in education.

Finally, I made my way to the principal's office to ask where I could find Eli. "He's in room 141, freshman English", the secretary said, and I was on my way in the direction she pointed.

Halfway down the hall I met the Principal. We stood there chatting for awhile and the bell rang. It was like the last of the great herds, hundreds of children going in every direction as fast as they could go. I spotted Eli in the flood of students, yelled for him to come on over. "Buckwheat! How ya doin man?" exclaimed Eli. "Great, just great, buddy," I said. "Its good to see you." "Bunbiter," Eli giggled, meaning "flatterer". We had exchanged greetings in the customary fashion; enough said.

Just then a great deal of noise came pouring out of a classroom. Quickly, the Principal entered the room, and finding no teacher in sight, asked the nearest girl where the teacher was. With a frown, she screwed up her face and answered, "she bez gone." The Principal said, "O.K., I'll be back later", and we all walked out of the room. Some message came and the Principal had to take off somewhere, which gave me a chance to chat with Eli about his view of what the girl had really said.
If the girl had said, "She gone", it would have meant that she's gone right at this moment. Now, if she had replied, "She be gone", it would have meant that she is usually gone at this time. But the little girl said neither. By saying, "She bez gone", she had told us that the teacher is always gone; never in the room. Eli was the only one of us three that had understood the entire meaning of the girl's reply.

By the simple manipulation of the word "be" in that environment, a minimum of three meanings could be conveyed. I wasn't sure whose language was the most expressive, mine and the Principal's or Eli's and the little girls.

**Introduction to Language Acquisition**

A linguist wouldn't ask the question of which was better, correct or incorrect. Instead the question might be how did Eli and the little girl acquire their language: That is the first concept we'll explore; how does Eli or any person come by their language.

**BIBLIOGRAPHY**


2. Ibid.


4. Ibid., p. 72.

5. Ibid., p. 72.

6. Ibid., p. 73.


9. Ibid., p. 6.
SELF-TEST: INTRODUCTION TO LINGUISTICS AND CULTURAL DIVERSITY

Directions: Complete the following self-test exercises. Your responses may be checked by the key on the page following these items. Pages to be reviewed are listed for any items you have had difficulty with.

1. Linguistics can best be described as (circle one)
   a. a method of categorizing sounds
   b. a way of behaving while you try to find out about language
   c. a body of knowledge about language
   d. a method of speech therapy

2. Language can best be described as (circle one)
   a. what is produced when one speaks
   b. a constant, simple system, not dissectable into smaller components
   c. a body of speech usages conducted in terms of a set of rules
   d. a simple method of communication between groups of people.

3. Which of the following statements of the relationship between people and how they have viewed language are true? (can be more than one response)
   a. People have much of the time been unconscious of the place of language in our lives.
   b. People have a good deal of knowledge about language, and how it works.
   c. Most people have knowledge of what language is, how it is acquired, how it works and what and who it affects.
   d. People have taken language for granted and overlooked its significance in man's actions.

4. Which of the following statements are true of a language? (can be more than one response)
   a. Language is a human institution
   b. Language is a system
   c. Language remains constant
   d. Language is erratic and haphazard
   e. Language is a form of behavior that becomes habitual

5. "The forms and functions that a language takes have developed across an expanse of time and space, through constant variation, addition, deletion, selection, reorganization and modification of words and grammatical rules." This best illustrates:
   a. the stability of language
   b. the haphazard way language comes about
   c. the lack of customary ways of speaking
   d. the way languages change
6. A group of people are systematically studying the structural and functional components of language. How might these persons best be described?
   a. Sociologists
   b. English teachers
   c. Anthropologists
   d. Linguists
   e. Speech teachers

7. Which of the following questions would a linguist be most likely to ask?
   a. Which language sounds the best?
   b. How was the language acquired?
   c. How is the language incorrect?
   d. Which language is correct?

8. Directions: In the following items you are to judge the effects of a particular policy on the educational well-being of culturally diverse students. In each case assume that there are no other changes in policy which would counteract the effect of the policy described in the item. Mark the item:
   A - if the policy described would tend to reduce the existing degree of difficulty providing an education for such students.
   B - if the policy described would tend to increase the existing degree of difficulty providing an education for such students.
   C - if the policy described would have an indeterminate effect on the difficulty of providing an education for such students.

   1. Teachers pursuing more knowledge about language.
   2. Select a correct approach to language instruction and use it with all children.
   3. Continue on the basis of present knowledge about language.
   4. Stress adaptability in language instruction approaches.
   5. Realization that children may bring alternative systems of language to the classroom.
   6. Minimize a preoccupation with the "correctness" of a "standard" language.

9. Directions: The underlined statement at the end of the problem is assumed to be the correct answer. You are to explain the underlined conclusion by selecting one statement from the list following the problem.
   Problem: A principal walked into a classroom and asked a Black girl where her teacher was. The girl replied "she bez
gone". The principal thought the girl meant that the teacher was gone right at that moment. Instead, the girl meant that the teacher is, as always, out of the room. The principal didn't understand because:

a. The girl had used poor English.
b. The Principal didn't understand that "bez" means "is"
c. The Principal's understanding of "bez" isn't the same as the girl's
d. The Principal didn't listen carefully enough

10. Suppose that students continually use such phrases as "save money for dog food", "beware, entering blood's crib", "she bone", "she be gone" and "Mr. Charlie", all of which teachers haven't heard before. What should the school's response be in terms of instruction?

a. Get the students to stop using the Non-standard English and teach them Standard English in its place.
b. Let the students use the language they want to and not expect them to learn Standard English.
c. Recognize the differences in language and help the students learn to use Standard English in addition to the language they now use.
d. Help the students who ask for help and leave the others alone.

11. In a concise a manner as possible, formulate a statement about the significance of the study of language in the education of culturally diverse students.

12. "As educators, our task is no small one. We must find out how to expand the language command of non-standard as well as standard English speakers, for those who have and those who have not, for the "culturally disadvantaged" and the "culturally favored". The approaches may have to be different; so be it. That is where adaptability is imperative. The central problem, then, is the need for teachers in the mainstream of American society to recognize the integrity, usefulness and strength inherent in linguistic and cultural diversity, and put this awareness to work in the classroom." Defend or attack the truth of the above position. In doing so, make clear (1) what meaning you are giving to "culturally disadvantaged" and "culturally favored" (2) the precise position you are taking in regard to cultural and linguistic awareness and its importance in the classroom.
### SELF-TEST KEY AND REFOCUS

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II. LANGUAGE ACQUISITION

OBJECTIVES

After reading this section, you should be able to:

- Recall the way children acquire language.

- Recall the age at which children have a grammar and substantial vocabulary.

- Know what the ability to learn language is dependent upon.

- Define language competence.

- Define language performance.

- Define a grammar.

- Recognize the best representation of a language acquisition device.

- Identify an example of a language transformation.

- Recognize a linguistic interpretation of the differences between the I.Q. scores of culturally different students.

- Apply knowledge of language competence and language performance to a language learning situation.

- Illustrate the relationship between language ability and I.Q. measurement.

- Apply educational policies of language instruction to the acquisition of a second language.

- Analyze a position taken on the way language is acquired.

- Theorize why different students display competence with different varieties of English.
Introduction of Language Acquisition

Eli, just as any small child, possessed a beautiful innate faculty for learning language while he was little. No one taught Eli his language; he learned it by himself, and no one could have stopped him from doing so short of locking him up in a closet. By the time he was six he already had a fantastic control of his mother tongue. He'd just picked it up, most of the time without realizing it. He was much like a piece of film, needing only to be exposed to language to become imprinted. "Furthermore, this is a faculty for language generally, not for any one particular language." (11) The language Eli learned had nothing to do with genetic inheritance, but depended upon the language, or languages he was exposed to. Eli learned only one language because he was exposed to only one; he could have learned more quite easily if exposed at that early age. Eli learned his language from his mother, father, sisters, brothers and friends, but not as the school wishes he had learned it. "Language is learned this way by bright kids, dull kids, by morons, by all but out-and-out imbeciles." (12) However, some children do learn language later than others and should never be considered imbeciles by the fact. Eli had a good control of the syntax of his language, or how he puts words together, and a lexicon or vocabulary of thousands of words by age six. He could say and understand with ease an infinite number of sentences that he had never said, nor heard before. In short, by age six Eli already had control of his language and mind.

"The central facts that human language is learned so early and is central to so much of our other learning makes it tempting to wonder if our ability to learn a language does not somehow lie at the core of our other human abilities." (1)

If the learning of language is so central to Eli's abilities and his ability to do other learning, then it's surely worth our while to explore Eli's acquisition of this amazing thing called "language", how it came about, and what it means to us as educators.

Stages of Language Acquisition

Noises: As a newly born baby boy Eli made sounds in response to internal stimulation rather than external stimulation. He made all sorts of sounds, coos, goos and cries. He refined the movements of his sound making mechanism which he would need later for speech. "They (nonsense sounds) are essential to speech sound production. Sometime during the primary period (four to six months) sound became pleasurable and he reacted to his own productions. He recognized that 'he' was making noise." (3) Finally Eli began to react to the world about him and to the most important thing in the world, his mother. At first there was just the "thing" that fed him, but quickly
she became more than a source of food and clean pants. She became warm hands, familiar smells and comforting sounds.

Babble: Other than his first response to the shock of birth, little Eli's noises were expressions of comfort and discomfort. By the time he was four months old his mother could tell the difference between the two. "Eli's early noises were repetitive. They are known as 'babble'". (4) Eli just babbled on by the hour trying eventually to make the kinds of sounds he heard his mother make. Eli's mother made sense of his babble whether it was sensible or not. Eli would go "ma-ma-ma-ma-, da-da-da-da- and his mother would seize on the sounds that she wanted to hear and would imitate back to Eli as exactly as she could, taking what she wanted to hear out of the stream of his babbling. Eli's parents aren't the only ones in the world guilty of such wishing; the same scene goes on throughout the world. Eli's babble seemed to serve him three purposes: "enjoyment, equivalent to play; the practice of skill in making sounds; and the provision of a stream of sounds from which parents can select in helping to equip the baby with his first words." (13)

First Words: When Eli's mother detected his first words she yelled, "he's talk'n, Eli's talk'in." She was partly right in that without his first words, there wouldn't be any to follow. But to a linguist, a single word doesn't mean that Eli had talked. Talking depends on Eli's ability to relate one word to another and at that time little Eli couldn't manage that. He was too young.

First Sentence: "The normal child at about a year old will say simple words. In the next six or twelve months he will make 'sentences' of two or three words." (14) Eli wasn't any different, but those two or three words that his mother thought was a sentence really wasn't. Eli would work on it. By the time Eli was about three-and-a-half he had all the essential structures of language. This sounds astounding but you've got to remember that acquiring language, being able to communicate, was practically a full-time occupation for Eli for three years. This is a lot of hours of listening, imitating, babbling and generally working at his language acquisition.

Importance of Imitation: Eli's language was acquired by imitation, but not only by imitation. There was an intense motivation in Eli to be like his mother and father - they were so huge and important and he so tiny and insignificant. So, he imitated them, particularly his mother because so much of his early life was spent with her. "From adults and other children he gains his vocabulary by imitation; he has no other means of gaining it. His whole mental dictionary, all the words he uses, was built in this way." (15) Eli's dictionary or lexicon was of very little use to him until he learned how to
arrange the words he had acquired. The use of Eli's language rested on the arrangement of those words. The following example from Andrew Wilkinson (16) shows how Eli learned to arrange his lexicon.

Learning Word Arrangement of Syntax: "Daddy cake eat", Eat daddy cake", "Eat cake daddy" were unacceptable attempts at saying "Daddy eat cake", although not so unacceptable for Eli as "Cake eat daddy". The way Eli came up with the "correct" formulation was again by imitating those around him. But imitation doesn't explain all of Eli's acquisition of language. What about all the times Eli blurted sentences he had never heard before? Once Eli saw a dog being given a biscuit for the first time and announced "Dog eat bikky." Eli wasn't imitating at this point; there weren't any dogs in his home and his parents would never go for feeding any dog biscuits anyway, so he could never have heard the sentence spoken before his announcement. Eli had acquired an underlying pattern from hearing "daddy eat(s) cake, and many other formulations like it. He had "abstracted" this pattern and then could arrange other words as he needed. This pattern was capable of many variations in itself: "Daddy is/was/will be eating cake." "Daddy is not eating cake." "Will daddy eat cake?" "When is daddy eating cake?"

Transformations: All of these variations are called transformations of the "basic" or "deep" meaning of the sentence. Eli didn't have to hear all possible basic sentences to be able to use them, and by the same token he didn't have to hear all the transformations to be able to use them either. Eli's ability stems from the grammar or the rules of his language that he has learned. His grammar sets all the rules that he follows in the variations he fools with in his efforts to communicate. A language's grammar and what it can do will be explored in greater depth shortly.

Language Acquisition Device: The remarkable feature of Eli's language learning is that he practiced and picked it up on his own, just as every normal child does. The acquisition of language is universal; all people learn their own language, but by what device does this acquisition take place?

Eli, as any child, possesses a Language Acquisition Device. Eli's language is innate; "man is destined to be verbal." (15) "His ability for language is a built-in device; he only needs language to imitate (reinforcement) so that he could be provided with some means of testing the possibilities supplied by his built-in device." (6) "It's reasonable to suppose that a child cannot help constructing a particular sort of grammar to account for the information presented to him any more than he can control his perception of solid objects or his attention to line and angle" (2) Eli's language structure reflects not so much his experience but rather the input of the
language environment provided by those close to him into this innate language acquisition device. From the input, and the processing of his innate acquisition device, Eli produces a grammar or competence of grammar, how he speaks and formulate sentences, is his linguistic performance.

By age four Eli had his grammar. He constantly tried things out, keeping the things that worked and discarding the things that didn't, constantly imitating, until he formed a grammar. The development of a language is the development of a grammar. The richness of Eli's grammar or competence is the sum product of the richness of the language environment he had to imitate from, and his innate mental ability to acquire language.

Linguistic performance of those people around Eli

Eli's innate ability to construct a grammar

Eli's Competence

Eli's Performance

Then the richness of Z, or Eli's competence is the sum product of X + Y.

Grammar, Competence and Performance: Now we need to explore what we mean by Eli's grammar, competence and performance. First of all we said Eli had his grammar by age four, but what is it that he had? What will it do? And how important is it?

Grammar: Eli's grammar is a device for defining (describing) his particular language, looking at every possible combination of linguistic elements and distinguishing those which are common to that language and those that are different from other languages. With his grammar Eli can generate all of the correct sentences of his language and none of the incorrect ones. He has a device, or a finite set of rules that generates or produces only correct or grammatical sentences; he had it when he was only four! Eli's grammar has to do so many things for him. It assigns proper pronunciation by phonological rules, lists permissible words or combinations, and assigns sequential and hierarchical order to his words through the phrase structure rules. Eli's grammar is the skeleton that supports his mind.

Competence: Eli's grammar is a description of the linguistic competence of an "ideal" speaker of his language; the intrinsic knowledge of his language. He is unconscious of this knowledge, but it is reflected in his grammar and his performance.
Performance: Eli's performance is more than the control of his grammar, it is the actual process of speaking. You can hear Eli's performance but you can only infer his competence.

At this point we teachers need to realize something about Eli and his grammar. Eli's grammar is only to some degree close to the "ideal" grammar of his language. We normally use the closeness of one's grammar to the "ideal" as a measure of his intelligence. Eli's non-standard Black English is diverse from what we think of as standard English, but, nonetheless, is based on a grammar. On that basis we need to be careful about assessing Eli's intelligence. It would hardly be fair to judge the grammar that describes his mental structures by the rules of another grammar.

Underlying Abilities: In order for Eli to learn his language he needed certain abilities; a summation of those abilities might provide a view finder through which educators can look at the language acquisition of kids in our schools, and Eli's bout with acquisition in particular.

Audit, Understand, Remember: It was necessary that Eli be able to "hear, understand and remember language events. He had to be able to initiate and experiment with those events as well as solve the problems that occurred as a result of those language events." (7) In other words, Eli had to be able to audit language, remember what he heard, have the opportunity to perform or use language and have enough smarts to use language as a method of problem solving.

Eli's performance could easily be observed by just listening to him. His performance included his ability to manipulate the words he knew in a way that he communicates his ideas to others. Eli's ability to manipulate words in communication is not the same as others; no two children behave in the same fashion even though they might seem very similar.

Eli also had to be able to audit his production of sounds before he could begin to shape his repertoire of sounds into the grammar of his language. He needed feedback! Finally through making sounds and checking them out with others he heard in similar circumstances he learned which sounds were appropriate and which weren't. "If he was unable to audit what he heard, he may continue to produce the same combinations of sounds despite all efforts to correct him." (8)

Another asset Eli needed very much was his memory. He had to be able to "perceive differences, audit the perception and remember what he heard. He had to be able to remember it long enough to produce it consistently." (9) Eli's memory had to be able to retrieve as well as store the sounds he had heard or the whole process would have
been short-circuited.

Finally Eli needs intelligence, but this is a relative term. We already said that all but out-and-out imbeciles learn language, so its much a question of speed, maturation and creativity. Intelligence is involved in memory; the remembering of appropriate responses in less than identical situations involved Eli's intelligence "in that he must be able to perform an act involving the application of previously completed response to a new set of circumstances " (10) In this case Eli's intelligence is his ability to learn, to take advantage of existing information and extrapolate to different situations, not a measurement of performance under a fixed set of circumstances on a given day, in an environment that means little to him such as an intelligence test.

Ability to Learn Language Slows: It should be noted that at about the age of thirteen, or puberty, the ability to learn an additional language or language variety fades. Beyond the age of fourteen Eli will find mastering the standard variety much more difficult. The same is true of students trying to learn a foreign tongue. It seems important then that we not wait too long to provide Eli second language variety instruction.

Conclusion: We've explored how Eli, indeed, how all children acquire language and hopefully we've come by a good deal of knowledge that will be useful to us in our teaching. Although Eli's language acquisition device is like any other child's, his input from his parents, family and friends was different, his grammar, competence and performance different; he speaks English, but not standard English. Eli's language is a variety of English - diverse from the standard form.

Introduction to Language Variation, Change and Relativity: There is no doubt that it is important that Eli be able to manipulate the standard variety of English. We now need to explore how language changes, what varieties are and how they come about. It will then be possible to explore the method of developing abilities with the standard variety.
BIBLIOGRAPHY


4. Ibid., p. 53.

5. Ibid., p. 24.


8. Ibid., p. 27.

9. Ibid., p. 28.

10. Ibid., p. 30.


12. Ibid., p. 27.


15. Ibid., p. 56.

16. Ibid., p. 56.
SELF-TEST: LANGUAGE ACQUISITION

1. Which of the following statements is more correct about the way children first acquire language?
   a. Each child is taught his language by those around him.
   b. Children learn language by themselves; by listening to others.
   c. Only bright children can learn language by themselves.
   d. Learning of language is mainly dependent upon genetic inheritance.

2. Children have a control of syntax and a vocabulary of thousands of words by age (circle one)
   a. 6    b. 10    c. 3    d. 11

3. People's ability to learn language is (circle one)
   a. dependent upon their race
   b. dependent upon their educational system
   c. dependent upon their environment
   d. genetically determined
   e. a universal ability

4. Language competence can best be described as (circle one)
   a. the actual process of speaking
   b. the ability to speak grammatically correct sentences
   c. a native speaker's intrinsic knowledge of his language
   d. an ability to communicate with all those around you

5. Language performance can best be described as (circle one)
   a. the ability to speak grammatically correct sentences
   b. the control of a person's grammar
   c. a native speaker's intrinsic knowledge of his language
   d. an inference of competence; the actual process of speaking
   e. an effort to describe a particular language

6. A grammar can best be described as (circle one)
   a. a device or finite set of rules that generates an infinite number of correct sentences
   b. an ability to recognize correct English
   c. a way of speaking correctly
   d. the rules of English recognized as correct by experts in the field.
7. Which of the following best represents the Language Acquisition Device necessary for language learning? (circle one)

(a) Competence → Innate ability → Linguistic → Performance
   to construct a performance
   grammar
   of persons
   around the
   child

(b) Innate ability → Competence → Performance → Linguistic
   to construct a performance
   of persons
   around the
   child

(c) Linguistic performance of persons around the child
   to construct a grammar
   by
   Competence
   Performance
   Innate ability

(d) Performance → Linguistic → Competence → Innate ability
   to construct a performance
   of persons
   around the
   child

8. A child blurts out a sentence he has never heard before. By acquiring an underlying pattern through listening to similar sentences, the child is able to abstract from those sentences and arrange other words as needed to fit the pattern. This best represents a (circle one)

(a) extrapolation on what has been heard
(b) imitation of what has been heard
(c) intuitive leap from what has been heard
(d) transformation of what has been heard

9. An educator wishes to find out whether there are intelligence differences between White and Black students. He administers standard group intelligence test to all the students in the eighth grade of a large urban junior high school. He finds that on the average, Black students score 10 to 15 points lower on the test than White students. On the basis of the data the educator formulates a number of conclusions. Some of these are given below. Choose the one comment which might approximately be made in such an evaluation from a linguistic point of view.

(a) The test is of little value and should not be used.
(b) Care is necessary in such cases because cognitive ability is being judged on the basis of grammar that isn't necessarily shared by Black and White students.
(c) White students are more intelligent than Black students by the fact that they both had an equal opportunity on the test and the Whites scored higher.
d. Black students are more intelligent than Whites because they scored so well on a test designed by Whites.

10. Suppose a child was surrounded by persons speaking two languages when small. If this language environment continued until age six, what would the relationship of the child's language competence and performance be to the languages he had been exposed to? (circle one)
   a. The child would most likely have competence and performance in only one language.
   b. The child would most likely have competence but not performance in both languages.
   c. The child would most likely have both competence and performance in both languages.
   d. The child would most likely become confused and not have competence or performance in either language.
   e. The child would most likely become confused and have performance but not competence in either language.

11. A Black child from an urban area receives a low score in a verbal intelligence test. The score he receives is most indicative of (circle one)
   a. his innate ability to construct a grammar
   b. his linguistic performance
   c. his linguistic competence
   d. the linguistic performance of those persons around him when small

12. You have acquired some knowledge of language acquisition as it really occurs. In this exercise you are to identify the affects of some situation. After each item number, before the space:
   A - if the method would increase the likelihood of an acquisition of a second language
   B - if the method would have no effect or an indeterminate effect on the likelihood of an acquisition of a second language
   ___ 1. start language instruction at the 7th grade
   ___ 2. start language instruction at age 6
   ___ 3. start language instruction in high school
   ___ 4. start language instruction before beginning school

13. "Language is learned this way (imitation) by bright kids, dull kids, by norms, by all but out-and-out imbeciles." Which of the following best states the major premise of the argument.
   a. Intelligence is a primary factor in language acquisition.
   b. Persons from all backgrounds acquire language.
   c. Intelligence is of no importance in language acquisition.
   d. Language acquisition is a simple process.
14. "It's reasonable to suppose that a child cannot help constructing a particular sort of grammar to account for the information presented to him anymore than he can control his perception of solid objects or his attention to line and angle." Which of the following best states the underlying premise of the statement? (circle one)
   a. A child has no choice in the grammar he constructs.
   b. A grammar can't help but be constructed to account for what the child has heard.
   c. A child's grammar will be exactly as he is taught.

15. Based upon what you now know about language acquisition, put forth a theory of why one student has competence with the standard variety of English and another student has competence with a non-standard variety of English.
## SELF-TEST KEY AND REFOCUS

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II. LANGUAGE VARIATION, CHANGE AND RELATIVITY

OBJECTIVES - after reading this section you should be able to:

- Recall the basis for differentiating one language or language variety from another.

- Define a language field.

- List the primary causes for language change.

- Define primary language changes.

- Define restructuring language changes.

- Recall an explanation for the existence of differences between standard and non-standard varieties of English.

- Recall the persons most responsible for the theory of language relativity.

- Recognize the best definition of speech community.

- Recognize the best definition of speech field.

- Identify possible uses for language other than communication between speaker and hearer.

- Predict the effects of extended isolation between two groups of like-speaking people on their language.

- Apply educational policies to the possible acquisition of the standard variety of English by non-standard English speaking Black students.

- Illustrate what can be inferred from different cultural groups expressing different world views.

- Analyze a statement about education and its relationship to language and thought for its unstated assumptions.

- Create an example of the educational consequences of semantic differences between teachers and students.

- Judge a statement about the effect of teacher expectations on student performance as it relates to cultural and linguistic diversity.
Introduction

It is important that Eli be able to manipulate the standard variety of English, however, before we can help him we need to first explore how languages diversify, how varieties or dialects come about, and how his language affects his world view and our ability to teach him.

Language Variety, Not Dialect

In many speech communities, where a rigid standard is assumed, the word "dialect" is a negative term, describing a form of the language that an "educated" person would never think of using. "In others, it is applied to the speech of quaint old people in out-of-the-way places." (16) In still others, it describes the funny way everybody but "me" and my friends talk. "Scientifically, a dialect is simply a habitual variety of a language - geographic or social or both - set off from other such habitual varieties by a complex of features of grammar, pronunciation and vocabulary." (17) A dialect can also be defined as a grouping of idiolects (separate individual's speech) that have something in common. "But despite the attempt of linguists to provide adequate definitions and descriptions, the term "dialect" is still too often used negatively, and some of the best-known materials devised for coping with striking social differences in language still set up an opposition between standard language and 'local dialect'." (18) For this reason, it's probably best that we drop the term dialect as the point we work from and confine ourselves primarily to a discussion of regional and social variations in language, or language varieties.

Attitudes About Language

Before starting an exploration of language change, what language varieties are, how children such as Eli are effected, and what this means to us as educators, it's necessary to lay some groundwork from which to start. The perceptions of who we are, where we belong socially, who others are, and where they belong socially, are intimately interwoven with the attitudes we have about language. Decisions about what differentiates one language from another, the amount or type of deviation from a perceived "standard" that is necessary to constitute a "dialect" are all arbitrary decisions based upon attitudes. A person's attitude determines what speech community he considers himself a part. The decision is a qualitative one, not a quantitative one.

Speech Community

Eli considers himself a member of a speech community. He would not look at it just that way, because as far as he's concerned he just
feels comfortable around a certain group of people. They all talk much alike and he can understand most of what they say. Even though Eli would not say it this way, the truth is that he shares at least one language variety and the grammatical rules of that variety with the other members of the community. He also shares the unstated social rules for conduct and the rules by which the members interpret what one another have to say. This speech community that Eli feels a part of is actually an overlapping or a synthesis of what linguists call a "language field" and a "speech field". That doesn't mean a great deal until we look at how Eli fits into the scheme of things.

Language Field and Speech Field

A language field is the total range of communities that Eli can communicate on because of his knowledge of different language varieties. A speech field is the total range of communities that Eli can communicate in because of his knowledge of the social rules of speaking.

A language variety is an attitude; it's an attitude held about the speech of a certain part of the speech community. You can see that there is no way that speech community can be separated from language variety; the two define one another. Both are based upon arbitrary decisions - attitudes of belonging. In order to study language change you have to study and compare the varieties of a language and their environments.

Variety Within Community

Without Eli's community there is a great deal of variety - there are differences in pronunciation even between Eli and his buddies. There are differences in vocabulary particularly between age groups and even some variations in grammar, particularly in the spoken language. Variety and change is inevitable within language; the passing of time necessitates both.

Eli's parents, brothers, sisters, friends, teachers and causal acquaintances provide him an amazing opportunity to develop a range of linguistic behavior or a "speech network" that allows him to communicate across language varieties. The wider the range of contacts Eli has, the greater his social assurance becomes. The better powers of observation he develops, and most important, "the greater the likelihood of his being able to switch not only from one degree of formality to another, but from non-standard to standard as well." (20) We'll take a harder look at that switching process in our coverage of registers and bilingualism.
Effect of Language Variety

It must be remembered that Eli's mother tongue or language variety "has its own history and is the result of a complex of forces such as (a) settlement history, (b) routes of migration and communication, (c) prestige or isolation of the community, and (d) its social and educational system." (22) But, most of all it represents to Eli who he is, what group he is a part of, and it's the structure through which he looks at the world. The whole of Eli's environment is ingrained in and mirrored by his language - the rules that govern a great deal of his thoughts are embedded in his grammar. Learning new ones will be difficult. To make any effort to rid him of his variety and replace it with what we consider to be standard English will be both misguided and fruitless. "Studies recently made show the need for dropping rigid dogmas about language standards and for examining the speech of many communities and social groups on their own merits." (23)

Regional and Social Variety

More than any other social institution, language often binds its speakers into a cohesive group sharing common ideals and aspirations and a common way of perceiving the world. But at the same time people who are supposed to speak the "same" language may not be able to talk to each other at all since those varieties they speak are mutually unintelligible. An Arkansas pig farmer and a Rhode Island fisherman might not be able to understand one another at all if both spoke their own language variety. Eli has a great deal of difficulty understanding what William F. Buckley means when editorializing on his talk show and the old Brooklyn Dodger fan finds the Scots storekeeper's speech unfathomable; all are speaking the same language called English. Obviously, the decision of what constitutes "a language" is a very arbitrary judgment.

Isolation and time are the great allies of language change; water, mountains, deserts, political, economic, philosophic and racial boundaries all isolate people and force their language to meet the changing dictates of their environments. Thus, the language of those isolated groups change over a period of time.

Cause for Language Variation and Change

Eli and his brothers and sisters are isolated - segregated on the basis of skin color, social and economic status, boundary lines separating their ghetto from the other world, their language variety and a slowed education. Given this degree and method of isolation it seems logical that the Black communities' language will experience different changes than that of the societal mainstream.
The Black experience is rather unique in this country. Language variation is a matter of attitude as we have found. One's place in a speech community is chosen by a matter of attitude of where one belongs linguistically. Eli has made a choice, but he by no means would consider his language to be non-standard or substandard. His language is different than the variety taught in the schools, but Eli works at that diversity. The difference in variety is symptomatic of the cohesion of the Black community - of Eli's "Blackness" itself. As we shall see later, the Black community, and Eli and his buddies in particular are constantly expanding their lexicon and changing the meaning of their formulations so that they can understand what one another mean, but outsiders cannot. There is an amazing amount of jargon in the Black lexicon and most of it is not understood by the standard English community.

Indian and Chicano communities have much the same experience with language change and variation. However, the ethnic minorities are not the only ones with such experience. Consider the reasons for the distinct variety and grammar of Appalachian Whites. Being White, some of the explanations regarding a genetic lack of intelligence formulated to explain the difference of Black, Indian and Chicano speech from that of standard English do not apply very well. Possibly then, their degree of diversity from the standard English can be explained by their extreme isolation up there in the hills, mountains and hollows with their hunting dogs.

If two of our Appalachian friends from the same hollow were to settle on two mountains with a large valley between, in a few generations, without contact, different changes will have taken place in the two groups. In time, they might find it very difficult to understand one another. Given enough time, it's possible they could be speaking mutually unintelligible languages. Language appears to be uniform within a group of people who are continuously speaking together; say, within a particular speech community, village or ghetto. When there is a break in contact between two groups of a speech community and they become isolated, their language changes differently due to numerous environmental reasons.

Primary Changes and Restructuring Changes

There are two sorts of language change, primary changes and restructuring changes. Our schools have a very different effect on the speed of the two. Primary changes, or changes in grammatical rules, syntax, phonology are all slowed by an educational system rooted in written language. On the other hand, restructuring or changes in vocabulary are speeded by the schooling process.
Sound Patterns

Language varieties also differ in their sound patterns; a good deal of misunderstanding comes from the fact that the meaning isn't communicated, not because of a lack of logic but instead, a lack of audition. Simply, the patterns are different enough that the listener can't pick up the meaning.

Stages of Sound Pattern Change

William Labov explored the way in which the sound patterns of Eli's speech changes over a period of time. The evolution of the change takes place in stages. (3) First, the sound changes usually originate with a restricted sub-group of the speech community such as Eli and his buddies in the ghetto at a time when it's important to express a cohesion or togetherness on their part. At first the change is rather sporadic even within Eli's own language variety. Next, after a period of time, what was an isolated sound change becomes a common change of the whole sub-group, or in this case, the Black community. This is called "change from below" and is a function of group membership. The next step is that succeeding generations within Eli's community carry the sound pattern change even further beyond the original model. Then something really quite remarkable happens. To the extent that some of the values of the original sub-group are adopted by other groups in the speech community, the sound change spreads to these adopting groups. That is the case of a lot of changes originating in the minority communities and then spreading to the young of the middle class communities. The limits of the spread of the sound change are the limits of the speech communities. The sound change is now approaching the limits of its expansion. The change becomes a norm of the entire speech community and all members of the speech community react to its use in a relatively uniform manner. (Without necessarily being aware of it.) This movement within the linguistic system always causes readjustments in the distribution of other sounds within the language, which in turn leads to further changes. Other children like Eli entering the speech community adopt Eli's group's original sound change as a part of normal language and start their own changes from that point just as Eli did.

Assumption of a Standard

Much of the difficulty of developing a language program in schools grow out of a widespread acceptance of the assumption that there is a standard variety of language, governed by a prescriptive grammar that has to be "the" model of usage. "Unfortunately, however, this assumption is not always based on an examination of the facts of usage; indeed, many of those who discuss the need for a standard do not understand the rationale from which standard languages have developed, consciously and otherwise." (19)
It should seem rather obvious that except for very rigidly defined situations, such as communication between a patrol car and the desk operator of a police station, there is a great deal of variety in the way a language, even a supposed standard language, is used by its speakers. "The larger the speech community, the greater the amount of variety possible." (20)

Acquisition of Standard Variety

Eli, growing up in his community learns to speak in the local variety. With more and more input from the outside, he will acquire more and more of the standard language. "But so far in the history of mankind, complete standardization seems nowhere to have taken place." (1) That is probably because a "true" standard is an empty term, an "ideal" not possible to totally achieve. However, Eli doesn't speak standard English as his native tongue. "Its only when he reached school, long after his speech habits are formed, that he is taught standard language. No language is like the native speech that one learned at one's mother's knee." (2) Eli will never be perfectly sure of standard English after growing up with the Black English variety. Eli's "mistakes" in language are simple variations carried into the standard language. Existence of logic, esthetic value, or even consistence within the "deviant" language variety are irrelevant in most cases. Variations from the standard form are simply considered to be "bad" in educational environments.

Education's Reaction to Language Varieties

How has the American school room dealt with Eli and his language variety? The first step is an answer to that question, then we can go on to explore what the study of language change might do for the teachers of all the Eli's in the educational system. The "authority" that labelled Eli's variety as being "bad" or "incorrect" has not always been the teacher when we look at the reality of the situation. "The dictionary, the spelling book, and the school grammar have traditionally been regarded as absolute authorities, far outweighing the teacher himself. The authoritarian position of the spelling book reflects, as we shall see, a real uniformity in American attitudes toward language." (4) It's not that the schools shouldn't pursue a uniform spelling system, but such uniformity implies that there is "a correct way" in pronunciation, syntax and vocabulary as well. That would lead to one constant, never-changing language that would be applicable for all people in all situations. "Most Americans recognize an external standard of correct English - that is, a standard which is something other than the way they speak themselves."(5) They have been taught to recognize differences and that difference equals "wrong". Whatever language variation Eli and his family brought to school (their mother tongue) hasn't been considered the language
itself, but rather a very poor approximation of the standard. As a result, they come up with a very poor opinion of their own grammar and mental ability. "To the question, 'what do you think of your own speech?' we often obtain answers such as 'terrible,' 'horrible,' or 'not too good.'" (6) Eli, his buddies and some proud rural groups have kept a certain amount of prestige and even tried to build on it through their vocabulary and formulations but they are all made to feel painfully aware of their inadequacy in school. "Such urban dialects as the everyday vernacular of New York, Philadelphia, Pittsburgh or Chicago are ranked very low in the social scale, and speakers quickly learn to prefer (consciously) the more standard forms which teachers hold up as a model." (7)

Traditional Method of Instruction

But again, why is it that Eli and his friends are held up as such poor examples? The modeling technique has been the method of teaching correct language in the schools. Obviously the teacher speaks the standard English of the textbooks, the students should acquire this standard, and if they depart a little, education is served by the teacher correcting any possible deviations as they occur. Normally, not too much attention has been paid to how the student deviates from the standard any more than the reasons for an incorrect answer in math is questioned. It's just assumed that the child hasn't learned the right answer yet.

However, Eli and his buddies aren't considered the normal case. They are plainly labelled by their skin color - being Black - even though in many schools they are the majority. Eli's non-standard variety of speech seems to be far more "incorrect" in relation to standard English than the white children whose speech is "incorrect". In Eli's case "it's quite difficult for the teacher to assume that his language is simply an imperfect copy of his own." The total numbers of "errors" and "deviations" amount alarmingly until it becomes apparent to most observers that there are some fundamental differences in the rules. Teachers are faced with so many problems that they simply "do not know where to begin", and many now feel the need for some understanding of the language they are dealing with, if only to economize and concentrate their efforts." (8) There is an interesting paradox here. The teachers many times try to teach standard English as a second language, but without reference to Eli's mother tongue. The "closeness" of Eli's language variety to standard English is the main source of interference and difficulty with learning the standard, "but it is also the means of direct communication between the teacher and him." (9) The teacher has to have an understanding of Eli's variety in order to take the first step in Eli's education just as a teacher would have to know English to teach a speaker of English another language such as French or German.
Pronunciation and Syntax Differences

For instance, as William Labov found in his studies of Black kids in the schools of New York, Eli and a great many members of his speech community have a great deal of trouble with the pronunciation of words with sps, sts, or sks clusters. A great many Blacks just can't say "wasps", "lists" or "desks", these plurals come out as "wasses", "lisses" and "desses", all of which is noticed but very seldom questioned by the teachers. Somehow they look at it like the stereotype we have of a Chinese saying "rice", it always seems to come out "lice", and we never ask why. At the same time the teachers haven't asked many questions about the consistency with which Eli changes the word "there" to "it's". Eli says "it's a difference", "it's no one there", "it's a policeman at the door." He says all these things very consistently. They are not mistakes, they are examples of the grammatical rules by which Eli's language variety operates. (10)

Teacher's Language Background

Perhaps there is one other explanation of teachers sensitivity to different sounding speech. "American school teachers have traditionally been drawn from the lower middle class, the strong tendency towards "hypercorrectness" stems from their efforts to correct any variations they developed in youth and to become a model of "correctness". Along with some linguistic insecurity and extreme range of style shifting, they have an extreme intolerance towards other dialects." (11)

For a long while now, teachers have been asked to regard a child with Eli's language to have "another" way of speaking, to look upon it as "different" from the language of the school, rather than labelling it sloppy, lazy or illogical. But that is a tough thing for many teachers to do; that attitude is hard to come by since they (perhaps unconsciously) recognize Eli's language or any other deviation, as much the same kind of pattern they have tried so hard to correct in themselves.

Eli's language deviates from that of the standard speaking community to a greater degree than we normally find in the contact between language varieties. But how great are the differences? An exploration of that question seems necessary before proceeding to an examination of the educational problems involved in teaching Eli.

Similarity of Standard and Non-Standard Variety

Not long ago, linguists dwelt on the differences among languages and the fact that there was almost no limit to the ways in which language could differ from one another.
"However, the opposing view is strong in linguistics today - there is a greater interest in the ways in which language resemble each other and how they carry out the same functions with similar rules. When we look at English varieties from this point of view, the differences do not appear very great. They are largely confined to superficial, rather low-level processes which have little effect upon meaning. Sometimes the dialect variety forms only seem very different on the surface." (12)

Eli constantly says "Didn't nobody see it." or "didn't nobody hear it." Both of these declarations appear to be questions which would be a radical departure from standard English. "But closer investigation shows that this is merely an extension of the standard rule of English which generates "never did he see it", or "nor did anybody see it." The negative is placed at the beginning of the sentence along with the first part of the verb phrase, which contains the tense marker." (13) By switching the order of the tense marker and the subject, the sentence has the same order as a question; but "never did he see it" is no more a question than Eli's formulation of "Didn't nobody see it." With a bit of study the teacher would discover that Eli's language variety doesn't deviate from the standard to the extent it would seem at first glance. For instance, Eli might say "he goin home" or even "he going home", but a standard English speaker would never say "he going home". He'd possibly say "he's going home", but probably would say "he is going home." There is a consistancy involved here. Wherever Black English can delete the verb, both Black English and standard English can contrast it. But wherever standard English can't contrast, Black English can delete. With such knowledge the teacher would be less apt to judge Eli as dull, lazy or illogical and be more apt to find a basis from which Eli's skill with the standard variety might be improved.

In Eli's case, the differences from standard English "are not logical or semantic differences but rather different formal selections from a common repertoire of forms." (14) There really aren't too many instances where Eli's language makes a grammatical distinction that is totally missing in the standard. The most obvious example of this fact is that of the use of the word "be". Eli can distinguish "he be with us" (meaning he is generally with us) from "he is with us" or "he with us", which can mean that he is generally with us or he is momentarily with us. "On the other hand, several of the finer points of the standard tense system, such as the future, may be missing. But the main body of language variety differences do not affect the basic meaning of the sentence." (15)
Language Differences and the Classroom

Now, how does our knowledge of the nature of language differences affect our dealings in the classroom? What we educators have found out about language differences, regional and social should detour the repetition of old cliches about the degeneration of language in the mouths of our young. Even if Eli does have a smaller vocabulary than his supposed more highly educated neighbor, we know full well that he has a lot more than five hundred words that have been attributed to Black kids by some educators, psychologists, sociologists and even linguists. Whatever differences there are, aren't as important as the realization that all varieties of language are learned in the same way - through contact with, and imitation of other speakers. "Any differences between standard and nonstandard varieties can be explained, not in terms of intellectual or moral differences, but simply in terms of differences in social and cultural experiences." (24) An awareness of these facts should serve as the foundation of any program emphasizing language in the schools.

If an awareness of linguistics can be put to use in Eli's classroom, his language variety can become a source of enrichment of the curriculum. Eli's language is one of the most intimate possessions. It's ingrained in his percepts of family, friends, and neighborhood. As such, Eli's language should be respected by all who encounter it - particularly his teachers. Understanding is of paramount importance when Eli has to supplement his mother tongue with another form of speech in formal and usually uncomfortable situations. A lesson might be learned that would minimize the source of a great deal of discomfort for both Eli and his teacher. The realization "that there is no reason why one should not use the varieties of grammar, pronunciation and vocabulary found in a classroom population to show that language, the most characteristic feature of human behavior, can come in a wide range of patterns." (25)

Eli had already achieved his most important feat of learning by the time he showed up for the first day of the first grade. He didn't have total control of all the details, he had pretty darn good mastery of his language variety with all its pronunciation features, inflectional patterns and a large number of syntactic structures. What happened to Eli after that point has been dependent upon the opportunities he was given.

Why Learn the Standard Variety?

"But if this is true, why should he be expected to master the standard language, whatever that is? Again, the fact is that some varieties of the language are "more equal" than others. Most of the exchange of public information on which the functioning of our society depends -
including almost all of what is found in print, is through the standard language." (26) It's all very nice to argue that a minority group - any minority group - has the right to its own form of speech but the argument is really very shallow if the restriction to a single form of speech shuts its users off from the economic and educational opportunities they need. In this instance, Eli's mother and father have been wiser than a great many of their liberal spokesman. They are insistent that Eli go to school and that the schools teach him the kind of language behavior that will provide him the chance for a better life than they have had. Up to this point their insistence has been to little avail - we have had very little knowledge of the problem and acted even less when we did. That misguidedness needs now to be changed. Educators can use their knowledge to provide the Eli's of the classroom with better tools. "In this sense, language education is the work of a lifetime. We should at least hope that those who direct the language instruction in the schools should not inhibit students from exploring resources of the language." (27)

Eli's language is the most intimate of his possessions. It's the material on which his mind runs; it's the media through which he perceives his world. It would be difficult for Eli to think about his world without his language and it would be impossible for him to tell his teachers about it. If we wish to ever know much of Eli - what he thinks about, what he's capable of thinking of, or how well he can think - we need to know what effect language and words has on his ability to look at his world or what he sees in it, his reality.

"The teacher often forgets that no approach to a symbol-based subject (which the school is comprised of) can be justified without assumptions and theories about the relation of language to thought." (32)

Language Relativity

Benjamin Lee Whorf and Edward Sapir have formulated a theory of language relatively to explain the effect of one's language on his world view. If Eli's language is different from the norm in which we evaluate in education, perhaps he doesn't share the same perceptions of the world as his evaluators. The theory has wide acceptance within anthropology and linguistics. We'll see just what the theory's implications provide in the way educational strategies for the schools and Eli.

Whorf-Sapir Hypothesis

The major formulation of the Whorf-Sapir Hypothesis is the notion that the perceptions, thoughts, views of nature and the world in general on the part of any given group of speakers is organized for the most part unconsciously by their language. (34) That thought might appear
so simple as to illicit a "so what" response from many, but a teacher cannot afford such a response. We'll find through our exploration that the tie between Eli's language and the way he looks at the world about him is of a great deal of importance in his education.

When you strip Eli's language to its barest element you'll find an effort to find "meaning" in the world about him. His language shapes not only how he thinks but to some degree what it's possible for him to think about. In this respect Eli's language is not only the vehicle for sharing his thoughts but also the pilot in that it determines how he formulates those thoughts. Eli's language sets the limits of his ability to perceive and share those perceptions with those around him.

Linguistic Realitiety Principle

From the notion that one's language organizes his view of the world comes the Whorf-Sapir "Language Relativity Principle" which says the persons with different grammars are pointed to different perceptions and evaluations of similar happenings. Hence, people with different languages or language varieties aren't equivalent observers and most likely will arrive at different views of the world. Whorf stated that "language is not merely a reproducing system for voicing ideas but rather is itself a shaper of ideas, the program and guide for the individual's mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade. Formulation of ideas is not an independent process ... it is part of a particular grammar and differs from slightly, to greater, between different grammars." Kids speaking different languages or language varieties then have varying world views. This presents some important implications for the classroom teacher that we'll explore a little further on.

Teachers' Concerns

As teachers, our main concern is with the sociological aspects of language - language as both the cause and effect of Eli's social situations and actions. This would seem to focus attention exclusively upon the social function of his language. But it is also important to have some knowledge of the more general functions of language because these are fundamentally related to most cultural, social-psychological and societal functions of Eli's language. Without such knowledge he will continue to lack orientation for many of the sociologically important features, functions and dysfunctions of language in the classroom.
An understanding of words and their place in the structure and operation of language is necessary for knowledge of the social functions of language. All of Eli's words have something behind them; they stand for the means by which he experiences, articulates and transmits the world around him.

**Importance of Semantics or "Meaning"**

Eli's social group can be identified by the words he has for things and he can recognize other's social status and groups by the names they put on segments of their reality. Try a few of these examples. The first will be Eli's formulation and the second, the equivalent in the standard English of his teacher. Eli would say "agent", "gum shoes", "heat", "stick man" or "the man" and his teacher would say "police". Eli might yell "kill the box," his teacher would say "turn off the stereo." Eli would say "for days" or "for real" and his teacher's formulation would be "that's the truth." "He has his nose open, says Eli. "He's in love", says the teacher. To the question "what did he do?" Eli would reply "hugged a coat, man", which means to his teacher, "He stole a coat." Picture yourself as the teacher for a moment when you hear Eli and his buddies using the following: "File", to treat someone badly. "Hold your mud", to show courage. "Hoopy" or "whoopy", a car. "A jacket, a bad reputation. "Oreo," a Black who tries to be White. "A rib", a girl. "He's pushed", he understands. (28)

Through the various words, Eli's language presents pictures of reality that has continuity to his people. They can all conceive of a particular person or kind of person when Eli says "The man's an Oreo." Eli's language has very specific and particular categorizations of his experience and those who share his language variety.

Eli's vocabulary, however different from his teachers, alerts him to what is "real", to what exists and allows him to distinguish in detail between "things", "actions", "states" and "qualities". His words function as his spectacles, through which he looks out upon his world and molds his comprehension of just what that world and all its parts mean to him. (36) Eli's language as such and his words in particular, are his primary vehicle for thinking. His brain thinks with words. Socrates said that "when the mind is thinking, it is talking to itself." (37) It's not a verbal game when we say that we cannot think without speaking or speaking without thinking. (17) Eli suffers the most acute mental discomfort until he is able to express an idea, or to formulate a reaction into words. "The only way to pin down a thought before it can slip away is to jump on it with both verbal feet, to pin it down with language." (39) In fact, if Eli stopped to take note of what he is doing when he's thinking he would find himself in a sort of imaginary conversation. His active brain is actually in perpetual conversation with itself.
Then, Eli, or any other kid in our classroom, can only express those parts of their potential thoughts that their linguistic medium permits. Their thinking can never be more precise than the language which spawns it.

**Words Stand for Things and Concepts**

For Eli, effective reality is essentially a language made affair. He catches it and encircles it with his words. Those words Eli uses not only stand for the things and acts he experiences, they carry all of his meaning regarding those concepts. Words are Eli's most important signs. He doesn't think without the use of signs or symbols when he is in the process of "creating" a subject. The "subject" is only a "simple" way in which Eli can talk about or share some rather arbitrary chunks of the world he lives in. "The word is not the thing", believed one of our philosophic ancestors in recognition of what we've talked about - the symbol is not what it symbolizes. The symbol never refers directly to the "real" object, but only the thought or mental representation of that object. Words stand for the ideal entities our minds conjure up, which in turn refer to the physical ones.

**Words and Creativity**

Kids are creative creatures and Eli is no different. His creativity is a type of thinking - high level thinking - and as we've noted that takes place through the use of words. Darwin said that "creativity was to see what others had seen, but to think what no one else has thought." Eli has that ability, although many times it's not recognized. His language has provided him with all the facts to combine in the creative process all of the conceptualizations, all the techniques for combining the facts, and the ability to utilize the past collective imagination of his fellow language users in combining, ordering, and manipulating his verbalization which in the final analysis is creativity. (40)

**Language and Evaluation**

We're now concerned with the fact that any language is a "going concern" and is a powerful determinant of what its speakers perceive and categorize, how they think, what they think about among the myriad of possibilities and what is important, valuable and real for them. (40) If that's so, then what does the normal attitude currently prevailing in the schools do for a kid like Eli? If all kids start at one point, as with a behavioral objective and, after a period of time and experience, are supposed to end at the same "successful" point which the objective dictates, where does that leave the kid who might not perceive the question, experiences or answer the same as his teacher because of his language?
When we test Eli for cognitive ability, are we testing Eli or are we testing the worthiness of the test, its stimulus, expectations and the evaluator's ability to infer to Eli's intelligence through a different language variety with all its inherit bias? If we are to develop hundreds of behavior objectives, competencies, expectations and tests to evaluate the success of the Eli's of our world and their intelligence, we had best first take a hard look at the way we're going to approach language - both ours and Eli's.

William Labov forcefully tried to explain the devastating effect of being too hung-up on an "ideal" standard of language and designating a child who deviates very far from that standard to be suffering from "verbal deprivation". The work of Rosenthal and Jacobson (1968) on self-fulfilling prophecies shows that the progress of children in the early grades can be dramatically affected by a single random labeling of certain children as "intellectual bloomers". When the everyday language of Negro children is stigmatized as "not language at all" and "not possessing the means for logical thought", the effect of such labeling is repeated many times during each day of the school year. Every time that a child uses his form or his dialect he will be labeling himself for the teacher's benefit as "illogical" and a "non-conceptual thinker." (45)

**Difficulty With Translation**

To know Eli you need to know what his linguistic usage means to him. Since his usage has such a significant influence on his thoughts and the way he behaves in the classroom it seems important that we know what his words mean to him. The average teacher, when confronted by Eli with his peculiar language structure and what the supposed meanings are, is likely to be less than pleased at first by what appears to be fundamental deficiencies in intelligibility, or outright departures from common sense, good logic and good taste. To know Eli is to know how he thinks and how he interprets himself, his group and his world. Because of linguistic diversity on Eli's part, there are vast possibilities not only for misunderstanding, but for complete lack of communication. (42)

A final difficulty for Eli and his teacher to deal with is that of translation. Eli, like his teacher, has a unique, complex system in his language whose structural and stylistic elements can't be exactly interpreted in meaning or intent by another language or variety. The factors creating the difficulties between Eli and his teacher are numerous. Their worlds of experiences, historical and contemporary, are different. Because of this difference there's a diversity of their conceptual and semantic worlds. Words like "freedom", "democracy", "equality" and "brightness" may have very different meanings to Eli and Miss Ann, his teacher. There is a "cultural", "ideological" and
"spiritual" gulf between the two. In general, the wider the differences between language groups, the greater difficulty in translation. Even though there are differences within the white community in language, that diversity isn't apt to cause the degree of difficulty in understanding that Eli's will. There are too many metaphors, images and idioms in Eli's head that are completely mystifying to his teacher. For instance Eli says "that bro has soul", which means that the Black buddy he's talking about has a certain spirit that is "Blackness". But the words "soul" or "bro" almost defy even approximate reproduction in Miss Ann's standard English. The "real" meaning of "soul" and "bro" lie hidden deep in Eli's view of the world about him. (44)

Application of Teacher's Knowledge

One area the teachers knowledge of language relativism might well show up is in the case of helping a student to realize that some part of what is called the "different thinking" of "different" people is due to peculiarities of their different language. Eli might learn that about the Spanish-American and White kids and they about him. Possibly the best position for a teacher is to remain curious and searching about Eli's language and what he thinks - to explore the possibility that the language-thought process of Eli's culture can be, if not perfectly translated, at least adequately understood by making an effort to learn Eli's variety of English while trying to teach him to use the standard variety.

Conclusion

The material and concepts we've explored are pervasive in the all-too-real educational environment of the teacher and Eli. Hegel, Max, Darwin, Freud, Nietzsche, Whorf and Sapir all asked men to look behind their own "stage" and discover that they were not what they thought they were. We ask the same of Eli and other children daily. So the nature of language, which is a part of each of us, discloses information about who we are and what we believe ourselves to be which might be quite different from what we suspected. It's difficult for Eli, for Johnny and for Mary, but it is particularly difficult for the teacher of those kids to admit the possibility that their precious, private, unspoken thoughts may be aborted conversation or even muted oratory. This unexpected recognition, so firmly conditioned out of the student who is taught to verbalize a sharp distinction between words and thoughts, may, when reviewed by the adult teacher, become an important diagnostic lens for understanding that secretive, sensitive world where language and thought blend to reflect experiences and express Eli's beliefs. When this comes to pass, Eli's language and what he thinks will be seen as inseparable aspects to be honored and used in the process of his coming-to-know about this world. (33)
Introduction of Registers

Eli possesses two language varieties at a minimum. One he uses very well, it is his mother tongue. It's the language he uses at home, on the streets and with his friends. It's Eli's non-school register. Eli uses another, but not nearly so well. It's the language of the school - standard English - Eli's school register. Our next step in coming to know about linguistics and the schools is to explore what registers are - both school and non-school. Eli is judged by educators, psychologists, sociologists and even some linguists on the basis of his manipulations of the school register. He's classified as verbal, non-verbal, bright, dull, priviledged or linguistically deprived on the basis of that manipulation. The next conceptual section is on "registers", what they are, why they exist and how they effect the educator's view of Eli's verbal and cognitive abilities.
BLBLLIOGRAPHY

2. Ibid., p. 393.
5. Ibid., p. 3.
6. Ibid., p. 3.
7. Ibid., p. 4.
8. Ibid., p. 4.
9. Ibid., p. 5.
10. Ibid., pp. 26-27.
11. Ibid., p. 28.
12. Ibid., p. 40.
13. Ibid., p. 40.
15. Ibid., p. 41
17. Ibid., p. 94.
18. Ibid., p. 94.
19. Ibid., p. 85.
20. Ibid., p. 85.
21. Ibid., p. 94
22. Ibid., p. 95.
23. Ibid., p. 104.
24. Ibid., p. 105
25. Ibid., p. 106
26. Ibid., p. 106
27. Ibid., p. 107.
30. Ibid., p. 221.
31. Ibid., p. 221.
33. Ibid., p. 299.
34. Hertzler, Joyce, A Sociology of Language, Random House Press, 1965, p. 120.
35. Ibid., p. 38.
36. Ibid., p. 41.
37. Ibid., p. 43.
38. Ibid., p. 43.
39. Ibid., p. 43.
40. Ibid., p. 47.
41. Ibid., p. 117
42. Ibid., p. 126.
43. Ibid., p. 128.
44. Ibid., p. 130.
SELF-TEST: LANGUAGE VARIATION, CHANGE AND RELATIVITY

1. Decisions of what differentiates one language from another or the amount of deviation from a "standard" necessary to constitute a dialect are (circle one)
   a. quantitative decisions
   b. arbitrary decisions
   c. easily made distinctions
   d. scientifically discovered decisions

2. A Language Field can best be described as (circle one)
   a. the total range of communities one can communicate in because of his knowledge of the social rules of speaking
   b. where speakers all understand one another
   c. the total range of communities one can communicate in because of his knowledge of different language varieties
   d. area of language study

3. The two primary causes for language change are (circle one)
   a. race and intelligence
   b. intelligence and technology
   c. education and technology
   d. isolation and time

4. Primary language changes can best be described as (circle one)
   a. change in semantics
   b. change in grammatical rules
   c. change in vocabulary
   d. change in logic

5. Restructuring changes in language can best be described as (circle one)
   a. change in vocabulary
   b. change in logic
   c. change in grammatical rules
   d. change in audition

6. Differences between standard and non-standard varieties in English can best be explained in terms of (circle one)
   a. intellectual differences
   b. differences in education
   c. differences of genetic background
   d. differences in social and cultural experience
7. The two men most responsible for the theory of language relativity are (circle one)
   a. Benjamin Whorf and Edward Sapir
   b. B. F. Skinner and Sigmon Freud
   c. Carl Rogers and Jean Piaget
   d. Ivan Pavlov and Edward Thorndike

8. Which of the following represents the best definition of the term Speech Community?
   a. A group of persons one feels comfortable speaking with
   b. A group of persons sharing the grammatical and unstated social rules of one language variety
   c. A group of persons sharing the grammatical rules of one language variety
   d. A group of persons speaking the same language

9. Which of the following represents the best definition of the term Speech Field? (circle one)
   a. The total range of communities one can communicate in
   b. The total range of communities one can communicate in because of a knowledge of the social rules of speaking
   c. The total range of communities one can communicate in because of a knowledge of different language varieties
   d. The total range of one's speaking ability

10. Black communities are constantly expanding their lexicon and changing the meaning of their formulations so they can understand one another, but outsiders cannot. Language is also used as (circle the best answer)
    a. A defense mechanism and cohesive force of Black community
    b. A method of entertainment
    c. A defense mechanism
    d. A cohesive force
    e. An expression of "Blackness"

11. "The perceptions, thoughts, views of nature and the world in general on the part of any given group of speakers is organized for the most part unconsciously by their language." This best illustrates (circle one)
    a. Language difference
    b. Language variation
    c. Language Relativity
    d. Language Change
12. A group of people from the same speech community, speaking the same language variety, find it necessary for economic reasons to split up - one group going over a mountain range and setting up its own community. The two groups have no contact for 150 years. When prediction, if any, can be made concerning the language of the groups after this long isolation from one another? If you believe a prediction can be made, make it and give your reasons. If you are unable to make a prediction, indicate the reasons for your inability to predict. (essay)

13. Directions: In the following items you are to judge the effects of the stated policy on "Non-standard Black speakers' ability to learn the Standard variety of English. Mark the item
A - if the policy described would tend to hinder the acquisition of the Standard variety.
B - if the policy described would tend to help the acquisition of the Standard variety

1. For the schools to assume variations from the standard to be bad.
2. To regard the dictionary, spelling book, and prescriptive grammar as the absolute authority in language.
3. To teach the Standard by a "modeling" technique, copying the teacher's language
4. For teachers to learn to understand the Non-standard variety and use that knowledge to help teach the Standard.

14. Suppose a group of people thought that the sky was an Inverted bowl of blue and that the "law of gravitation" doesn't make any sense at all - things don't fall because of a law, but because there's nothing to hold them up. Leaves aren't green because of chlorophyll but because they have greeness in them. The beliefs are plain common sense; they satisfy the needs because they are an adequate system of communication between the people in the group. If this information was presented to a linguist, what might he say about the intelligence of the people? (may be more than one response)
a. They are obviously not very intelligent
b. They haven't heard of science and, therefore, aren't very bright
c. Their language is reflective of a different world view than ours.
d. Their response is in no way indicative of intelligence or a lack of it.
15. "The teacher often forgets that no approach to a symbol-based subject (which the school is comprised of) can be justified without assumptions and theories about the relationship of language to thought." An important unstated assumption involved in this argument is that (circle one)
   a. Language and thought are one.
   b. The relationship between language and thought is important to the teacher's job.
   c. If a teacher is to know what a child is capable of thinking about, it's important to know what effect language has on his world views.
   d. One can't think without language.

16. "From the notion that one's language organizes his view of the world comes the Whorf-Sapir "Language Relativity Principle" which says the persons with different grammars are pointed to different perceptions and evaluations of similar happenings." An assumption basic to this statement of a good deal of importance to the classroom teacher is the knowledge that (circle one)
   a. A teacher can never hope to communicate with a student with a different grammar.
   b. People with similar grammar view the world in the same way.
   c. People can only express those parts of their potential thoughts that their linguistic median permits.

17. Directions: Write an example of the way a difference of semantics or meaning of words between a teacher and a Black student might cause difficulties in communication and thus, teaching. Your example should be creative, depicting possible problems while showing some application of your readings to your personal perceptions. (essay)

18. "The work of Rosenthal and Jacobson (1968) on self-fulfilling prophecies shows that the progress of children in the early grades can be dramatically affected by a single random labeling of certain children as "intellectual bloomers". When the everyday language of Negro children is stigmatized as not language at all and not possessing the means for logical thought, the effect of such labeling is repeated many times during each day of the school year. Every time that a child uses his language form or dialect he will be labeling himself for the teacher's benefits as "illogical", as a "non-conceptual thinker."
   a. Defend or attack the truth of the above proposition. In doing so, take into account the effects of teacher's expectations on the success of their students or the lack of success.
## SELF-TEST KEY AND REFOCUS

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IV. REGISTERS: SCHOOL AND NON-SCHOOL

OBJECTIVES - After reading this section, you should be able to:

- Define a register.

- Know the language behavior indicators of Black children speaking the School and Non-school registers of English.

- Recognize the type of language behavior an outside observer is most likely to view when observing Non-standard speaking Black children.

- Define the language deprivation theory.

- Recognize reasons for students speaking the school register of English.

- Recognize viewpoints generated by observation of Black children's language in the school situation.

- Recognize the type of educational policy generated by verbal and cultural deprivation theories.

- Apply educational policies to the evaluation of a child's language and cognitive abilities.

- Identify a child's probable language behavior in relationship to a teacher's belief that he has poor language and logical abilities.

- Identify the reasons an observer is most likely to observe a Black child speaking the school register.

- Identify the implicit assumptions present in a statement about language deprivation.

- Analyze a statement about student's linguistic behavior in terms of the important assumptions not considered.

- Organize a statement relating Black children's educational difficulties to poor auditory discrimination skills.

- Evaluate the creditability of data collecting methods on determination of verbal deprivation.
Introduction

Since linguists, psychologists, sociologists, and educators have only recently become involved with the study of language varieties, most examinations of the language of "disadvantaged" children haven't been as sophisticated or thoughtful as they might have been. (4)

Most of the judgments made on Eli and his buddies' speech have been based upon their school register, not the non-school or social register which they are very adept at speaking. We'll explore the way in which the judgments of "verbal deprivation" are made about Eli, and the criteria used for those judgments shortly. But first, what is a register and what's the difference between a school register and a non-school register?

Register

Susan Houston defines a register as a range of styles of language, which are appropriate for a particular purpose in a particular situation. For example, Eli speaks differently with his friends and family than he does in school. Eli then has a school register and a non-school register. Within each, he can vary his style or way of talking, but either can nevertheless be a single register since it contains features appropriate (in Eli's mind) to the particular situation and no other. (5)

School Register

Eli's school register is made up of behaviors in addition to speech - sullininess, hand gestures, facial expressions and so on - while he is speaking. The way Eli talks in the school register doesn't resemble the "natural" language of children of his age. He talks in short utterances, speaks slowly, laboriously and in a higher pitch than he does with his friends on the street. Very seldom will Eli ever reveal his personality or what he feels in the school register, it's a limited form of speech for him. (6) Around the school it is very clear that all Eli's friends are also speaking in the same register. In order to find out much about Eli's verbal ability and his other assets it's necessary to get him to speak in the non-school register. This is no easy task for an observer or a teacher.

Judgment on Observation of School Register

The reason that register is so important is that it accounts for many common observations about Eli's language and kids just like him. Eli uses the school register with a variety of people and a variety of situations, not all of which involves the school per se. He'll use
it around adults, persons who have authority over him, people he doesn't know, especially older and White; and perhaps most of all, in situations that he considers formal and school-like, threatening to him or when his behavior is obviously being observed for any reason. In short, it is a defensive mechanism as well as a method of communication. At any rate, the school register is the form of language almost certain to be observed by outside researchers or teachers studying his language. The obvious limitations of the school register in form and content is largely responsible for the frequent statement that "disadvantaged" children are linguistically and perhaps cognitively deprived. The mistaken impression of Eli's ability that his school register first gives to the unprepared or thoughtless observer is unfortunate, but none-the-less common. Even Eli and his teacher regard the school register as his "best" speech since it represents speech most like the standard variety. Without a doubt, Eli uses the non-school register with more ease, naturalness of expression, fluency and comfort. (7)

Observation of Non-School Register

Once an observer sees the non-school register, his perception of Eli's communicative abilities changes dramatically. Far from being non-verbal, Eli is beautifully creative and imaginative in the use of his language. Eli engages in constant verbal play, story telling and language games with his friends. A high value is placed upon linguistic creativity, talents are continuously developed in spontaneous narration and improvising on traditional stories passed from generation to generation. (8)

Example of Creativity

Eli grew up with stories, they were her equivalent to the Mattel toys that middle class children grow up with. He loves to improvise and fool around with the stories passed on to him. Out and away from the school atmosphere when he was eleven years old Eli told his version of the "Three Little Pigs" as passed on by his grandfather who was raised in the south. Eli's version went this way:

This story bout three lil pigs. One day, the lil pigs went out to play. They made lil house. One made a dog house an one made a hog house. One made a pen. Then the wolf came. "Let me in!" "No no my shin shin shin!" An then he say "I'll blow it." He puff, he rough, an he tough, and he blow the house down. An the lil pig run to the other house.
An then he came to the hog house. "Let me in, or I knock the house down!" An he knocked an he knocked, as he knocked the house down. And he went on in but the other pig run to the other house.

He came to the big house and the wolf say, "Let me in!" And he say, "No, no, no, my shinny shin shin!" He huff and he puff, and he ough, and he rough, but he couldn't knock the house down. And he say, "Lil pig, I know somewhere some applies at!" He say, "Where?" "Down to the Miller's house." And he say, "What time you goin?" "Bout one o'clock." And the lil pig show up at zero o'clock! And he went an pick the apples.

Then the wolf come and he say, "You ready?" An the pig say, "No! Don' you smell my golden delicious apples cookin?" An the wolf was mad" Then the wolf say "Lil pig! I know where some greens at!" "Where?" "Down to the Miller house." He say, "What time you going?" "Bout 10 o'clock." And then the lil pig got up at one o'clock. He went an got the greens and put 'em out and then when the old wolf came he say, "Lil pig! You ready?" He say, "No! I done got my greens. You smell it? The hot water still aboilin!" And old wolf say, "I'm a jump down you chimney!" And that ol pig put some water on the fire till when you could jump in it, and the lil pig had cook the greens. Yeah, he foll him. "He jump in the hot water, and the pig he had greens and wolf! (9)

Development of Verbal Deprivation Theory

Eli's inventive rendition of the "Three Little Pigs" is good evidence that his school register and non-school register are radically different, giving very different signals to a person observing his speech. His story wasn't a one sentence story, slowly spoken, stressed formulation without content or expression; it was instead very much the opposite. The traditional view of non-standard English held by a lot of educators is that it is an illogical form of speech; that when Eli is finally taught the standard form he will also be taught to think more logically. Some recent programs for teaching the "culturally disadvantaged" have revived the notion that non-standard varieties are illogical, attributing the poor academic performance of children like Eli to cognitive disabilities reflected in their language. (10)

Educational psychologists have attempted to discover what kind of disadvantage or defect Eli is suffering from. The viewpoint has been widely accepted that whatever cultural deficit Eli shows is a
result of an impoverished environment in his early years with an emphasis on his acquisition of language. The "deficit theory" then appears as a "verbal deprivation theory" based almost solely upon observation of Eli's school register - the one he has difficulty with. (11)

Unfortunately, these notions are based upon the work of some educational psychologists who know very little about language and even less about Black children. As we've seen in the Whorf-Sapir Hypothesis, this is no small oversight. The fact is that the concept of verbal deprivation has no place in social reality. In fact, Eli receives a great deal of verbal stimulation in the home. (12)

The notion of "verbal deprivation" is a part of the modern mythology of educational psychology, an example of unfounded notions which tend to expand rapidly in our educational system. But the myth of "verbal deprivation" is particularly dangerous because it diverts attention from the real defects of our educational system to the imaginary defects of the child. (3)

Method for Observation of Verbal Deprivation

The most useful service educators can perform is to clear away the illusion of "verbal deprivation" brought about by thoughtless observation of the school register as the language ability of children like Eli, and instead view Eli's language in its entirety; both school and non-school registers.

For example, here is an example of an interview with a Black student by a psychologist from which observations about his verbal and cognitive capabilities are often drawn. (Taken from William Labov's paper "Logic of Non-standard English." (14)

The boy enters a room where there is a large, friendly White interviewer who puts on the table in front of him a block or a fire engine and says "Tell me everything you can about this." (Interviewers remarks in parentheses)

(12 seconds of silence) (What would you say it looks like?)
(8 seconds of silence) A space ship. (Hmmmm) 13 seconds of silence) Like a je-et. (12 seconds of silence) Like a plane. (20 seconds of silence) What color is it?) Orange.
(2 seconds) An' whi-ite. (2 seconds) An' green. (6 seconds of silence) (And what could you use it for?) (8 seconds of silence) A je-et. (6 seconds of silence) (If you had two of them, what would you do with them?) (6 seconds of silence) Give one to some-body. (Hmmmm. Who do you think would like to have it?) (10 seconds of silence) Cla-rence.
(Mm. Where do you think we could get another one of these?) At the store. (O ka-ay!)
We've just seen the defensive, monosyllabic behavior of school register that is many times viewed as the child's entire verbal ability. But what brings it about?

**School Register as Defense Mechanism**

The child is in a situation where anything he says can literally be held against him. He's learned some ways to avoid saying anything in this situation and works hard at the omission. If anyone is going to take the interview as a measure of the verbal capacity of the boy, it must be as his capacity to defend himself in a seemingly hostile environment - not his total verbal capacity. His non-school register will better indicate that. (15)

**School Observations**

To provide a perspective of how the "verbal deprivation" notion is formulated by observers within the school and that assessment in relation to the actual verbal abilities of children, we'll take a look at an experience Eli and this writer had with psychologists and sociologists observing in his school. (The following is mainly an adaptation of William Labov's article "The Logic of Non-Standard English.") (16)

After checking in at the office, which is good protocol, I walked to Eli's classroom. Class wasn't quite over yet so I decided to wait. Two men came out the door shaking their heads. "This only goes to show what I've been saying all the time," one man said to his friend. "These children come from such an impoverished environment and are plainly culturally deficient. As a psychologist, and after what we've just experienced in our testing, it's evident that these children have received very little verbal stimulation at home. They couldn't possibly hear any well-formed language, and as a result are verbally impoverished." "You're right," countered his friend. "They can't even speak complete sentences; don't know the names of common objects; and can't form concepts or convey logical thoughts." "Anyway," he said, "I think they all have lazy lips and lazy tongues."

What on earth was I hearing? I couldn't believe my ears. Here were two guys with little name tags on their chests identifying them as Dr.'s X and Y and making statements that did damage to common sense. "Lazy lips and lazy tongues." Just imagine, I thought, twenty million people, all lazy in the exact same part of the anatomy. What a scientific find! And no concepts or logical thoughts, amazing!

The discussion in the hall continued. "I'm not sure what I believe anymore," the psychologist said. "I came here to try and help but I'm beginning to believe that Authur Jensen is right, these children are
just genetically inferior." "It seems as if they have no language at all, so what can the school do for them if they can't even talk?", said the sociologist. "I do believe that they lack the favorable factors in their home environment that allow our middle-class children to do well in school."

"Well, for instance, I asked a boy just yesterday if he has dinner with his parents, if he engages in dinner-time conversation with them or if his family takes him on trips to museums or other cultural experiences." "Do you know what I found out?" "Well," (followed by a gulp of air) "I found out that none of those things happen and he couldn't even answer beyond 'no' and 'uh, uh'." "There's no doubt that they haven't developed cognitive skills through talking with adults, including the ability to reason abstractly, speak fluently and have any long-range goals. Most of lower-class language consists of an incidental emotional reaction to action here and now." A nod of agreement from his colleague quickly followed.

No language at all!, I thought. Unbelievable! It would be an anthropological phenomenon if you could find any group of persons with no language let alone finding a culture with a lexicon of less than 2000 words. Most children, Black and White, have vocabularies of an excess of 24,000 words. And what a way to do "research", walking up to a child and asking him numerous questions about his verbal activities with his parents and whether he goes to museums or not. How absurd, I thought, not even directly observing the verbal interaction in the home or in the child's home stomping grounds. What do they expect beyond "no" or "uh, uh?"

"Well, for instance," continued the psychologist, "it's even worse at the lower levels." "When I worked with some four-year old negro children, I found that their communication was a bunch of gestures, single words and a series of badly connected words or phrases like 'They mine' and 'me got juice', they couldn't make statements of any kind without exaggerating. They didn't even know where to look when I asked the question, 'Where is the book?' "A bunch of emotional cries, that's all you can say for their language", he concluded. "Well", said the sociologist, "I guess we've found that their language isn't even mixed up or underdeveloped English as we had thought, it's basically a non-logical mode of expression behavior." "Bad auditory discrimination skills probably", the psychologist offered. "They can't learn English because they have poor auditory discrimination skills," he repeated, very proud of his fine deduction.
By this time, I was in need of some Tums or Pepto Bismol. Bad auditory discrimination skills my eye! If I had subjected those two learned persons to the dialect of the hallway I would bet their auditory discrimination skills would suffer a bit. There are other, better arguments which I'll work at with Eli's help, I thought to myself.

After synthesizing the logic of the discussion, the following seems to be the reasoning of the observers:

1. When the kids responded minimally to a threatening and formal situation, they were judged verbally deficient or suffering from verbal deprivation.
2. This verbal deficit is the major cause of the Black kid's poor performance in school, if you don't initially buy Jensen's thesis.
3. Middle-class kids do better in school; middle-class speech habits and language are necessary for learning.
4. The differences in grammatical form between the speech communication is evidence of the differential capacity for logic.
5. Teaching kids to mimic formal teacher speech patterns is considered to be teaching a child logic.
6. Children may learn white middle class speech patterns and their logic will do much better in life.

**Self Fulfilling Prophecy**

We have already found through the Rosenthal study that the teacher's attitude towards the child is an important factor in his "success or failure". Rosenthal's work on "self-fulfilling prophecies" has shown that the growth of children in the early years can be greatly affected by a single random labeling of certain kids as "intellectual bloomers" and others as "average or below average students." When the street language and everyday language of Black children or any child is stigmatized as "not language at all", "not having the capacity for logical thought" and such labeling is repeated many times every day of the school year, we can imagine what is apt to happen. Every time a Black child opens his mouth he will be labeling himself in the teacher's mind as "illogical or non-conceptualizer" as we have discussed. But at the same time educators are being provided with a ready made cop-out by such thoughtless discussion. Of greater severity is the possibility of the entire educational enterprise abdicating its responsibility to anyone who deviates from the ideal "norm" and blaming the victims of the situation for its existence. All of those thousands of children are not to blame for their
seeming failure within this educational enterprise. That's an easy way out but makes little sense. Instead, we have to take a hard look at this institution we call education, along with the society which spawned it and make that institution meet the needs of the children rather than the children serving the will of the institution - to be "normal", whatever that is.

**Example of Non-School Register**

Finally, I made it into room 141 and found Eli in quite an interesting discussion with a beautiful little girl named Ruby. "Hey, Buckwheat", yelled Eli, "'s it goin'?" "Bitch'n Eli, just o.k." I said, "except for the guys that just left." "For real, Chucks, just Chucks," Eli growled, "Real fish."

Translated that means that it's true, the two guys are whites in authority who Eli dislikes and they're not too bright either. (1)

Ruby continued her discussion of her English class, not paying much attention to me, probably because I was a friend of Eli's.

"English. Our teacher when we firs got in here. I haven't got a pe. Girl sittin nex to me. She a teacher's daughter. Teachers always like the teacher's daughter over the other children, especially if the teacher go - is a teacher at that school. Her mama was a teacher dere las year. This year she teach at another school. She si righ nex to me. So she so stingy, I have some candy uh sumpin, she'll as me for some and I don't be wantin to give it to her and so nen one day she as me how de spell a lil ole simple word. Wha was that word? It star with a 'S'. It was scot, I think. Scot. She didn't know how to spell it, and I tol her. It was on a cross word puzzle. An nen I axed her for sumpin. Naw, the girl sittin on the other side of me named Delores. She ax her le'er use her ink pen. She say, "after today you no gon use my pen anymore, you better bring your own." An so Delores gave her the ink pen back. And nen teacher came ta'inbout un "I don't have any pets in here." Eribody cin come in the room and sit down. Here go Teresa, "May I go over to so and so, and so's room?" "May I go over to so and so and so's---?" She have 'bout ten places to go when she git in that room and teacher let her go ery place. And one day I had my brother's lunch money and I wanted to give it to him. And I tol her the reason I wanted to go and she wouldn't even le me go but - and, and she say, she say couldn't nobody go and nen Teresa jes walked up there and nen Teresa jes walked up there and had ten placed to go and she went to all ubum, but I couldn't go take my brother his lunch money. I can do all nis stuff and dy 'on't say nuttin. Person sit next to me chewin, be slipping in and chew eri once in awhile and she get 'em. She really get 'em." (3)
Gota git hatin'", and Ruby just got up and walked out, leaving me somewhat amazed and Eli relieved. Even though I found Ruby somewhat hard to follow phonetically, I didn't have doubts about her logic.

Logic of Non-School Register

"Eli, those two guys just said they had run some sort of an experiment in your class. What was that all about?" "Those fish were jiven us - somethin' about words and what they spos' to mean. Abstractions or somethin'. Teach said they were check'n our logic." "Yea, I heard," I said. "They made some bad mouth about your ability to abstract. You mind if we talk about something real abstract and I write a few notes to lay on those guys?" "O.K., but don't be shootin too hard", Eli said. "I'll start with this question. What happens after you die? Do you know?" "Yeah, I know," Eli said quietly. "What?" "After they put you in the ground, your body turns into - ah - bones, and shit." "Do you have a spirit, what happens to your spirit?" I asked. "Your spirit - as soon as you kick off, your spirit cuts out." "Where does this spirit go?" Eli thought a moment and said, "Well, it all depends - you know, like some people say if you're good as shit, your spirit be goin' t'heaven. . . 'n' if you bad, your spirit goin' to hell. Well, bullshit! Your spirit goin' to hell anyway, good or bad. So I asked "Why?" "Why? I'll tell you why. 'Cause, you see, doesn't nobody really know that it's a God, u'know, 'cause I mean I have seen black gods, pink gods, white gods, all color gods, and don't nobody know it's a real God. An' when they be sayin' if you good, you goin' t'heaven, tha's bullshit, 'cause you ain't goin' to no heaven, 'cause it ain't no heaven for you to go to."

Eli is a very adept speaker of the non-school register or non-standard Black English as opposed to the Standard English or the school register. We all know what's expected of Eli by his teacher. The kind of language you hear on television, Walter Cronkite through Marcus Welby. The variety school teachers teach. Eli's grammar was numerous examples of everyday non-standard and Black English that in no way indicates a lack of logical ability. "Don't nobody know", "you ain't goin' to no heaven", "when they be sayin", and "it ain't no heaven," are only illogical to the most naive or the dullest of people. All of us should realize that Eli has just provided us a beautiful example of the rhetorical style of non-standard Black English. He has summed up a complex argument in a very few words and there is little doubt as to what he meant. How can that be considered illogical?

Let's explore the logic Eli shared a little further to take a closer look at his logic. The basic argument is to deny the twin propositions. In linear order the information seems to be: (a) if you are good, (b) then your spirit will go to heaven, (-a) if you are bad, (c) then your spirit will go to hell. Eli doesn't believe (b) and
safety that if (a) or (-a) then (c) His argument is this: 1. Everyone has a different idea of what God is like. 2. Therefore nobody really knows that God exists. If there is a heaven, it was made by God. 4. If God doesn't exist, he couldn't have made heaven. 5. Therefore, heaven does not exist. 6. You can't go somewhere that doesn't exist. -b. Therefore you can't go to heaven. c. Therefore you are going to hell.

Well, I took what I had gathered from Eli and hustled down to the teachers smoke room where our observation-minded friends were. "I want you to take a look at something and see if you still believe that the children in the class you just left are verbally deprived and are incapable of logical thought," I said. "Now our data shows...", started the sociologist. "I know what you think your data shows, but I want you to listen for a minute and then see what you think," I said. So our friends read over the recreation of my discussion with Eli. "Well you made your analysis in Standard English, that's why it seems logical. If you had written it all in non-standard Black English it wouldn't make any sense at all" said the psychologist. A little ticked-off, I challenged the two to go and confront Eli further on his logic and see if they still felt he couldn't abstract or work with somewhat nebulous concepts. They said O.K. and we took off for room 141.

Our original argument was not carried out at a high level of seriousness. It is a game in which Eli will use a lot of devices to win. He didn't have any burning commitment to any of his statements and was willing to strengthen his argument by bending the rules of logic. But if the opponent invokes the rules of logic, they are somewhat binding, so the two experimenters decided to try to trip Eli up by his own logic.

The sociologist started. "Well, if there's no heaven, how could there be a hell?" Eli stammered a bit and said "I mean - ye-ah. Well, let me tell you, it ain't no hell 'cause this is hell right here, y'know!" The psychologist piped in, "This is hell?" Eli responded "Yeah, this is hell right here!" The scientists were a little amazed. Eli's answer was quick, ingenious and decisive; there was very little hesitation.

In spite of the fact that Eli does not believe in God, and has just denied all knowledge of him, the two experimenters advanced the following questions with the psychologist leading off: "...But, just say there is a God, what's your name, um.... Eli, what color is he? White or Black?" "Well", stammers Eli... "I wouldn't know what color, I couldn't say...couldn't nobody say what color he is or really woud be." "But now, just suppose there was a God" started the sociologist. Trying to qualify the boundaries, Eli starts, "Unless'n they say..."
"No", the sociologist started again, "I was just saying suppose there is a God, would he be black or white?" "He'd be white, man", Eli blurted. "Why?" Eli was getting warmed up now. "Why? I'll tell you why. Cause the average whitey out there got everything, you dig. And the nigger ain't got shit, u'know? Y'understand? So--um--for in order for that to happen, you know it ain't no black God that's doin' that bullshit."

At this juncture the two doctors found themselves somewhat amazed and disturbed at the same time. Their "hard" data and the conclusions drawn from it was somewhat shaken. It would be very hard to hear Eli's response to that question without it dawning on you that you had been in the presence of a sharp brained, skilled skeaper with a strong verbal presence of mind, who uses a particular variety of the English language expertly for a lot of purposes. Eli's formulation wasn't standard English, but it is clear and effective even for those not familiar with the venacular. It's obvious that Eli simply knows that God isn't black, because if he was, he wouldn't have arranged things the way they are.

Registers and Tests

We can now transfer this demonstration of the sociolinguistic control of speech or registers to other "test" situations, including I.Q. and reading tests used in the schools. It should be immediately apparent that none of the standard tests will come anywhere near measuring Eli's verbal capacity. On these tests he'll show up as very much the mono-syllabic, inept, ignorant, bumbling child the observer though the child in the first interview to be on the basis of his school register.

Experiences like the one we just explored with Eli should make educators aware of the fact that the social situation is the most powerful determinant of verbal behavior. As such, a teacher must enter into the right social relation with a child if he wants to find out what Eli can do. Up to this point, that is just what many teachers can not do.

Cost of Verbal Deprivation Theory

A philosopher once said that we pay for life in installments, and Eli is no different. He pays for the academic judgment made on the basis of his difficulty with and disinterest in the school register. He's put into an ability grouping as a "low achiever" in the remedial curriculum while the "high achievers" are in an accelerated version. On the basis of verbal deprivation, Eli is assumed to have some inborn deficiencies and the school sets about compensating for his deficiency. This assumption is an unproven and dangerous one; it has the "smell" of a "self-fulfilling prophecy" in that Eli is counseled, selected and given choices on the basis of its supposed validity. Once he's stamped as "slow" and he accepts that sentence, he and the school
conspire to make the discrepancy even greater without any malice on either part. Eli's difficulty with school seems to escalate.

Let me provide you with some of the more subtle offshoots of the verbal deprivation theory. Some sociologists and psychologists have put forth a strange view of the social world outside of the classroom - Eli's world. They view the attraction of the peer group as a "substitute" for success and reward normally provided middle-class kids by the school situation.

Eli told me a story that finally put me on the trail of this strange theory. School was just getting out and Eli was in his usual hurry to leave the "castle-without-a-moat". Skipping, jumping, and going through his customary gyrations he accidently dropped his notebook in a puddle. Eli stopped, cussed, shrugged his shoulders and walked off. A policeman and two sociologists were talking while standing nearby. All three walked over and stared at Eli's now soaked notebook with some degree of disbelief. "That's awful", remarked the policeman. "That kid could give a damn about school, it's all a waste of time for kids like that." "He just alienated from school", remarked one of the sociologists. "He's come to school without the verbal, conceptual, attentional and learning skills needed for school success." "Well there's no doubt that he feels inferior because he's failing ... he has just become hostile and has chosen to make up for his gratification need by going elsewhere, such as his peer group," joined the other sociologist.

This dialogue shows a good deal of naivete on the part of these sociologists and a number of their colleagues. To view the peer group as a mere substitute for school success shows an absence of knowledge about Eli's values and his adolescent culture. In truth, the children who are rejected by their brothers are quite likely to be the ones who find success in school.

We simply can't use what we are used to as a gauge for others. In middle-class suburban areas, a lot of children do screw up in school because of a lack of intellectual tools. In Eli's world of the ghetto, it is the healthy, vigorous, popular child with normal "smarts" who can't read, and fails day after day.

Somewhere between the time Eli first learned to talk and now, he refitted his language to meet the grammatical rules used by his buddies. From a linguistic point of view, Eli's "group" has a much greater influence on him than his family and surely the school. In the early grades, Eli was having the normal school difficulties, but in about the fourth grade things took a rather quick slide for the worse; his "groups" vernacular just became predominant. Instead of dealing with just one Eli, the school is now dealing with scores of
children who have integrated into groups of their own, with values and rewards that oppose those of the school. Nothing has value by itself until a human being places value upon it. Eli and the school place their value on different things.

School Register and Written Language

We've been primarily talking about the school language, but we deal in more than that in the schools. Eli has a more difficult time with the written language, particularly when it too is supposed to be the school register and it's there in black and white, easily observable, dissectable and measurable. (You got -9 on what you wrote about, what you think.) Even outside of the maze of differences between his dialect's formulations and that of Standard English, Eli has a lot of trouble with go, throw, sew, beau, though, where different spellings represent the same sound. (2)

Eli was asked why he seemed to have such an "I don't give a damn attitude" about English and writing themes. He related a story that wasn't too far removed from some of our own experiences. Eli kept leaving the English class feeling that "correct English" was about as accessible as morality. He left school feeling like the Puritans who felt that whatever was fun must be sinful, whatever sounds natural must be wrong. The final straw was the day he was going to show that teacher. He was going to write a "good" or "correct" theme. Instantly, he was in a state of anxiety. In about 50 minutes, he wore four or five holes in the first two lines of his paper by erasing, chewed his pencil almost through, got red-faced, beads of sweat began rolling down his upper lip and forming puddles on the paper. At the end of the period, there was nothing on his paper but erasure marks and blotches of sweat. Then Eli realized something. This was the "most correct" work he had done in that class - nothing. So, from that moment on Eli has been quite "correct", he's done nothing.

The only way you can sensibly figure out which is "better" is by finding out what people think the formulation is worth. "Goodness" or "badness" is not to be found in logic but in opinion, which Eli very seldom shares. It's not being said that right and wrong doesn't exist in language when it is being used within specific confines. The same styles and skills are not fitting for all situations. However, you can disagree with the grounds on which superiority or inferiority is claimed to rest.

Eli's teachers have gotten very disturbed with him at times. Eli once proudly reported, "I be done did my homework." (He was very proud at such a feat.) "That's bad language, exclaimed his teacher, hotly. "You can't talk that way." Well now that's absurd, he can too; in fact he just did and very well. Everyone around him talks that way. The teacher was about the some one around him that speaks the way she
does. On top of that, she's the only one that says, "he can't talk that way." With odds like that, Eli can't take her too seriously.

We've covered what registers are, how they're used, what effect they have on the user and lastly, but not least important, is the effect those registers have on the perceptions of the teachers, administrators and observers in the schools.

What Educators Can Do With the Knowledge of Registers

But now that we know something of how Eli came by his language, what it is, how it effects his world view, and when he uses his mother tongue and when he uses the school register, what do we as educators do about it?

We know that Eli uses at least two registers, school and non-school. We want Eli to be able to use standard English or the school register to the point that he can function in this society, have a chance for further education, a better job, the ability to make use of his brains and dreams in the pursuit of a better life for himself. Language can't do all of those things for Eli, but it can provide him a better chance if it's more in keeping with what this society places value upon.

Introduction to Bilingualism

In the final conceptual area (bilingualism) we'll explore the possibility of not doing away with Eli's non-school register, but instead teach Eli to manipulate the school register better through the use of his non-school register as a teaching aid. In short, bilingualism will consist of code-switching. Now, how do we do it?
BIBLIOGRAPHY


5. Ibid., p. 601.

6. Ibid., p. 601.

7. Ibid., p. 602.


10. Ibid., p. 2.

11. Ibid., p. 2.

12. Ibid., p. 2.

13. Ibid., p. 5-6.


15. Ibid., p. 6.

16. Ibid., p. 11.
SELF-TEST: REGISTERS - SCHOOL AND NON-SCHOOL

1. A Register can best be described as (circle one)
   a. a degree of speech competence
   b. a level of grammatical competence
   c. a scale to gauge language variation between geographical areas
   d. a range of styles of language which are appropriate for a particular purpose in a particular situation

2. Which of the following are behavior indicators of a Black child speaking the school register? (can be more than one response)
   a. Speaks in short utterances.
   b. Is very verbal.
   c. Speaks in a higher pitch than on the street.
   d. Is verbally creative.

3. Which of the following are behavior indicators of a Black child speaking the non-school register? (can be more than one response)
   a. Engages in constant verbal play
   b. Speaks very slowly
   c. Is spoken on the streets
   d. Is vividly imaginative

4. The form of language most certain to be observed by outside researchers or teachers studying the Black Child's language can best be described as (circle one)
   a. The school register
   b. The non-school register

5. The viewpoint that whatever cultural deficit a Black child shows is a result of an impoverished language acquisition environment in his early years can best be described as (circle one)
   a. A language inculturation theory
   b. A language deprivation theory
   c. A language acquisition theory
   d. An environmental impact theory

6. A non-standard English speaking Black child is engaged in the production of short sentences, spoken very slowly with a lack of expression. In a simple expression, what is the boy doing? (circle one)
   a. Expressing himself as well as he is able in any language.
   b. Trying to bother the teacher by playing dumb.
   c. Protecting himself in an uncomfortable situation.
7. These children came from such an impoverished environment and are plainly culturally deficient. As a psychologist, and after what we've just experienced in our testing, it's evident that these children have received very little verbal stimulation at home." This best illustrates (circle one)
a. A viewpoint produced by the observation of children communicating at their best.
b. A viewpoint produced by the observation of children communicating in an environment other than their home.
c. A viewpoint produced by the observation of children who are deprived of a culture and talk very little at home.
d. A valid view of most Black children's language.

8. If education continues to talk of verbal and cultural deprivation and the lack of logic in Black children's language, effort will continue to be expended on the correction of (circle one)
a. The differences of the children rather than the defects of the educational system.
b. The defects of the educational system rather than the differences of the children.
c. The best interests of verbally different children.

9. Directions: In the following items you are to judge the effects of a particular policy on valid appraisal of a non-standard English speaker's language and cognitive abilities. In each case assume that there are no other changes in policy which would counteract the policy described in the item. Mark the item.
A - If the policy described would tend to give a valid indication of the child's language and cognitive abilities.
B - If the policy described would tend to give an invalid indication of the child's language and cognitive abilities.

  1. Observation of the child's language behavior only in the school.
  2. Observation of the child's language behavior at school and on the streets with friends.
  3. Observation of the child's language behavior in a controlled, clinical atmosphere.
  4. Observation of a child's language behavior while playing verbal games with friends.

10. Suppose a teacher has the attitude that a child comes to school with no language at all and that it's doubtful that the child has the capacity for logical thought. If the child senses the teacher's feeling, what will be the child's probable language behavior with respect to the attitude held by the teacher? The child will (circle one)
a. try all the harder to who his language and logical ability
b. to become motivated to learn the standard English
c. be quiet, not wanting to exhibit what the teacher already feels about him.
d. only speak the language he learned at home to show the teacher that he can be logical.

1. Directions: The underlined statement at the end of the problem is assumed to be the correct answer. You are to explain the underlined conclusion by selecting statements from the list following the problem. (There can be more than one explanation for the conclusion.)

If a person is planning to observe the language habits of Black children in an urban junior high school by asking them questions and noting responses, what type of speech behavior is he likely to observe? He is most likely to observe the children's School register of English because
a. The children primarily use the school register in such situations.
b. It is the only form of language the children can converse in.
c. The children are threatened and use their language as a defense.
d. If the children spoke any other way it would make absolutely no sense to the observer.

12. "Well for instance", continued the psychologist, "it's even worse at the lower levels. When I worked with some four-year old Negro children, I found that their communication was a bunch of gestures, single words and a series of badly connected words or phrases like 'They mine' and 'Me got juice'. They couldn't make statements of any kind without exaggerating." Which of the following statements most nearly expresses the assumption implicit in this statement? (circle one)
a. Negro children can't communicate.  
b. "Me got juice" and "They mine" do not make sense.  
c. The communication with the Negro children was not of the quality you would expect from a White child.  
d. All four-year old children suffer from exaggerations.

13. After watching a Black student leave his books in a mud puddle, observer "A" remarks, "He's just alienated from school. He has come to school without the verbal, conceptual, attentional and learning skills needed for school success." Observer "B" adds, "Well there is no doubt that he feels inferior because he's failing. He has just become hostile and has chosen to make up for his gratification need by going elsewhere such as his peer group." (circle one)
An important assumption that is not made in this dialogue is
a. the boy doesn't like school  
b. the boy doesn't do well in school  
c. the boy doesn't have the abilities to do well in school  
d. the boy cares more for his friends than he does for school
14. "They (Black children) can't learn English because they have poor auditory discrimination skills." Organize a statement in response to the above statement. Relate your response to the schooling situation showing some application of the theoretical positions you have gathered from the reading materials. (essay)

15. Directions: For items a-d, assume that in researching the effects of student's culture on their education you find statements by a psychologist which supports the contention that Black children are verbally deprived. Indicate which of the statements would be significant in determining the value of the psychologist's statements. For the purposes of these items, you may assume that the information provided about the psychologist is true.

Key: a. Significant positively, i.e., might lead you to trust his statement.
    b. Significant negatively, i.e., might lead you to distrust his statement.
    c. Not significant, i.e., not important enough to make much difference.

   1. So far as you can find, the psychologist has never been in a classroom to observe.
   2. The man has a Ph.D. in psychology.
   3. The man is White.
   4. The man observed both the school and non-school register of the children's language behavior.
## SELF-TEST KEY AND REFOCUS

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V. BILINGUALISM

OBJECTIVES - After reading this section, you will be able to:

- Relate what effect the majority of a society speaking one language variety and a minority group speaking another variety, will eventually have on the language of a minority group.

- Define a recognition vocabulary.

- Define a receptive knowledge of language varieties.

- Recall the best relationship between instructional technique and bilingualism.

- Recognize a description of variety switchers and register switchers.

- Recognize the best definition of bilingualism.

- Recognize a healthy teacher attitude for bilingual instruction.

- Apply educational policies to the acquisition of the standard variety or register of English.

- Apply a positive approach to the instruction of a student having difficulty with learning the standard variety of English.

- Analyze an argument for the possibilities of adopting a nationwide system of bilingual education.

- Synthesize the necessary elements for bilingual program for non-standard speakers of English.

- Evaluate a proposition about the possibility of teaching children to switch registers according to the necessary situation.
Introduction

Language is a matter of attitudes. Where one language ends and another begins, where one variety ends and another begins, where one register ends and another begins; what is standard and what is non-standard, are all arbitrary decisions and distinctions based upon the attitudes held by those doing the defining.

Bilingualism

When a person acquires a non-native language he is supposed to be bilingual. What is a person who learns a non-native variety of language, or a non-native register? Are they bilingual, multilingual, bi-dialectic, co-lingual, coordinate bilingual or subordinate bilingual? These all are terms used by the linguists to describe what happens when a person acquires "speech" which is not that of their mother tongue. (7)

Learning Standard Variety

For our purposes and the purpose of simplification, we'll use just one term. Bilingualism will refer to the acquisition of a language variety or register in addition to the native language. In Eli's case it will be learning to manipulate the standard variety of English and the school register.

The language of many Black children is divergent enough from standard English to present teachers with a difficult dilemma. Everyone agrees that Eli deserves an education that is as rich as that of kids in the primarily White suburbs. He ought to be able to take pride in his background without being penalized for cultural differences not of his making and which are inferior only in the sense that people with "power" happen to have different patterns. If Eli is to compete "successfully" with his White contemporaries in the practical, if seemingly unjust world of the present day United States, he probably will have to learn the standard language variety or the school register much better. (8) But if in learning the standard variety, he is forced to reject his own variety and accept the majority view that his native language is inferior, the experience might do Eli a great deal more mental harm than social good. (9)

Difficulties of Learning Standard Variety

Why is it that Black children are any worse off than other kids who are faced with a strange language which they have to learn to speak and read? There are at least two reasons. The possibilities for a man with a poor knowledge of standard English to get a job have declined at a progressively faster rate. Automation is steadily eliminating unskilled
jobs. But even more than this, the child speaking Spanish, Greek, Italian, etc., speaks a language that both he and his teacher regard as a real language. It has its own writing system, literature and dictionary. There is no doubt that these kids are speaking an entirely different language, and the teachers realize that they have to start at the beginning with them. Such is not the case with Eli. He is accused of speaking an inferior variety of English. It's a simple delusion for the teacher to believe that Eli is speaking careless English, or he's just lazy, and not very bright.

Some of Eli's teachers might never realize that they are facing a situation with similar difficulties to that of instructing a foreign language. Even Eli doesn't grasp the truth that his own language variety has its own pattern and structure, and in that knowledge vacuum, he all too easily accepts a judgment that he is incapable of learning the "proper" way of speaking. In a truly "just" world we wouldn't expect Eli to learn another language on top of his own. Instead we would accept his language variety as being acceptable and respectable, just as valuable and flexible as any other (10). But linguistic history shows us that such an ideal is too remote to be taken seriously. When there is a large majority with "one" variety and a small minority with another, the minority learns the language of the majority, not visa versa.

The teachers of most White children speak varieties enough like that of their students so that there isn't much of a mystery about a learning problem. A White middle-class child is understood and sympathized with when he has trouble remembering when to write "four" and when to write "for". That same sympathetic teacher doesn't get too excited when her students say "hit 'em" rather than "hit them". But that same teacher may be utterly mystified by Eli's apparent inability to know when to write "toe", "toll", and "told". The teacher's task should benefit a great deal from an understanding of what spoken Black varieties are really like and how that knowledge can be used to develop more realistic programs.(11).

Bilingual Instructional Program

Perhaps then, the place to start is with an instructional program that borrows a few techniques from methods of foreign language instruction without implying an inferiority of the student's native language.

In the last few years many of the people who have been concerned with the education of children like Eli have come to believe that the realistic goal should be to encourage bilingualism, to capitalize upon the ability he already has at switching registers, and to develop ways by which he can learn to do it systematically and well. It is not only arrogant and misguided, but no doubt utterly useless, to ask
him to stop talking with his friends and family in the natural way he first learned. He can learn the appropriate time and place for the standard or school register - we already know that - Eli shouldn't have to reject either, but he has to learn to manipulate the school register much more skillfully. (12)

The first step in developing an attitude in Eli that would facilitate such learning, however, is to persuade the thousands of teachers of Blacks that the native language varieties of their students are of irreplacable value to them. These varieties deserve respect and understanding for what they are - a functional language - not blind and uncompromising opposition.

Recognition Vocabulary

It's been recognized for some time that a person's "recognition" vocabulary is always larger than the vocabulary that he uses. Eli, for example can understand a speaker with a different variety of language, but he is unable to speak like him. It is this capacity that spawns some ideas for education. (22) The usual assumption made is that Eli's production of speech will reveal his ability for speech. That is, if Eli consistently says "He don't". "We done ate". "She come home at five", it could be assumed that he does not know the forms "He doesn't", "We have eaten", and "She comes". While this may sometimes be true, such an assumption, by ignoring the ability to recognize more than he uses, could lead to serious mistakes in evaluation and teaching strategy. (23)

Receptive Knowledge of Language Varieties

A considerable amount of recent work has shown convincingly that student students from the first grade on (and often earlier) have a well-developed ability to understand and recognize speech they can't produce, or in other words have a receptive knowledge of language varieties other than the one which they speak. The clearest evidence had come from testing in which children of various ages have been asked to repeat sentences which they hear recorded on tape, or spoken by an investigator.

Examples of Receptive Knowledge

(Following example drawn from R. Troike's article on Receptive Bidualacticualism. (24) Eli took such a test along with an Appalachian White boy who has just moved into the school. The boy's name is Alvin. We'll show Eli's response with an "E" and Alvin's with an "A" when provided a sentence to repeat.
Model
Mother helps Gloria.
Gloria has a toothbrush.
She cleans her teeth with her brush.
David has a brush for his hair.
He has soap on his head.
They are on their knees.
The socks are on Gloria's feet.
The children go to bed.

Mother help Gloria (E)
Gloria have a toothbrush. (E)
She clean her teeth with her brugh. (E)
David have a brush for he hair. (E)
She has soat(t) on hers head. (A)
They are on theirs knees. (A)
The socks is on Gloria's feet. (A)
The children goes to bed. (A)

The interviewer then asked Eli to try a few longer ones by himself:
Model: Nobody ever say at any of those desks anyhow. Response:
Nobody never sat in none of those desks anyhow.
Model: I asked Alvin if he knows how to play basketball. Response:
I ask Alvin do he know how to play basketball.

In order to explain why the responses differ from the model, we must assume that Alvin and Eli don't merely attempt to mimic the sentences as the model says it, but rather they first "decode" the sentence for its meaning, and then "re-encode" it in the form they probably would have used if they had originally said it. Alvin and Eli are "trans-lating" from the variety of the model to their native variety of language. (25)

A fairly obvious conclusion which has to be drawn from these examples is that Alvin and Eli certainly understood the sentences they heard, or they wouldn't have been able to translate them into their own language variety. In short, we have to recognize that in most instances, kids are already receptively bilingual by the time they come to school. (26) Conversely, if a word or grammatical construction is not in a child's receptive competence, he'll experience a lot of difficulty in attempting to repeat a model sentence, often producing only incoherent fragments. (27)

William Labov found that kids like Eli won't have any trouble with converting a question such as "I don't know if he can come" into "I don't know can he come" but they are frequently unable to repeat otherwise identical sentences containing "whether" instead of "if". Similarly, Eli's little brother who is in the first grade can't repeat a sentence such as "John and Bill both have their shoes on", seemingly because of the "both" in the sentence. Apparently if Eli or his brother's brain does not possess the necessary information to process a sentence as it is heard, they will be unable to re-encode it or even to simply imitate it as said. (28) In this way, by using repetition testing, a teacher can discover what grammatical or lexical features are not in the receptive repertory of speakers as well as those that are.
A teacher engaged in teaching a standard variety of English as a second variety should not make the mistake of assuming that because students do not use the standard form they do not know it. Rather, their already existing receptive ability in the second variety should be recognized and the teacher should see the job as one of helping the student to practice and make use of this knowledge and ability in their own speech. (29) When Eli says "It is a book on the table", but understands that it is equivalent to "There is a book on the table; his teacher should recognize that he doesn't have to be taught the second structure from scratch but only needs practice and training in using it in his own production.

However, since not all students are bilingual to the same degree, it is equally important to assess what grammatical structures aren't present in a student's receptive ability. It is fruitless as well as frustrating for Eli to read lessons or classroom questions that are based on structures which are absent from his native language variety and which he doesn't yet understand in the second variety he's learning. Knowing what Eli understands and doesn't understand when hearing the standard variety is a necessity before a teacher can begin to work with him effectively. (3)

Some educators have suggested that the first grader is too innocent of the social world around him to realize the significance of language variety differences, and surely too young to be motivated to acquire a command of a second variety. But that is just not so. Five and six-year-olds are far more socially perceptive than most adults give them credit for, and it's only an educational myth which prevents recognition of this fact. As an example, let me use Eli's little brother Ronald. There are at least two ways in American English of pronouncing the word "creek": in one way it rhymes with "pick" (even to educated speakers), while elsewhere it rhymes with "peek". Eli's father happens to be a "crick" speaker and his mother is a "creek" speaker. Ronald said something to his father about how bad it was that they didn't have a "creek" behind the house, and was promptly reprimanded by his little four-year-old sister with, "Don't you know you're supposed to say "crick" to Daddy and "creek" to Mommy?" In another instance Eli's father scolded Ronald for saying "crayfish" instead of "crawdad" when playing with a friend. Ronald replied, "O.K., I'll say 'crawdad' when talking to you, but I'll say 'crayfish' when I'm playing with Jimmy cause that's what he calls it." (31)

Necessity for Early Instruction

It is clear that even pre-first graders are far from being linguistically naive and have already learned a great deal about adaptation within their own social world. We needn't wait until the student is a teenager to begin second language variety instruction on the grounds
that he isn't aware of the social significance of the standard variety. Instead, this would be a bad mistake. The optimum age for language learning is before eight, after which we know it declines and radically after puberty. To be most effective, second variety language instruction should begin as early as possible. Given enough opportunity to practice the patterns of the second variety, children might develop an unconscious, automatic control over their use. The longer such instruction is delayed, the less effective it will be. Eli's difficulty is testimony to that. The older he gets, the more difficult it will be for him to develop a complete control over the terms of the second language variety. (32)

Second Language Variety is Not a Foreign Language

In speaking of bilingual instruction the point has been made that some of the methodology of foreign language instruction is fruitful, but at the same time the point needs to be stressed that the methodology and rationale for foreign language instruction taken into an extreme when working with children like Eli can cause a good deal of grief.

ENGLISH A FOREIGN LANGUAGE TO BLACKS, a recent newspaper headline declares. Below the headline there is a description of a second language variety program which centers around the use of tape recorders in a laboratory. The students hear and repeat material originally intended for foreigners because, says the article, English to Blacks is "virtually a foreign language." (1) Stories like this one are turning up more and more frequently in the news. Eli and members of his family find the articles somewhat disturbing. There is not much elation in finding themselves not even as second-class citizens, but as foreigners in their own land. Instead, the possibility of building educational roadblocks and taking giant steps backwards is a very real possibility. Eli has a hard time seeing how you can get to equality through the vehicles of discrimination.

Before misunderstandings become compounded, it will do us well to review some of the observations that have been made by linguists with regard to second-language variety learning vis-a-vis the learning of a foreign language.

Similarities Between Foreign Language and Second Variety Instruction

What do we mean when we say that present-day approaches to the teaching of standard English to speakers of other varieties have much in common with modern approaches to foreign language teaching, especially the teaching of English as a foreign language? According to Virginia Allen, five points of similarity stand out: (2)
1. Both foreign-language programs and second-language variety programs are based on a contrastive analysis of the target language (or variety) and the student's home language (or variety). The "target" chosen for analysis is not the literary form of the language nor the idealized language prescribed by the older grammar books but rather the "language of the educated classes."

2. Both foreign-language programs and second-language variety programs view the target language and the students' home language as equally valid systems of communication in their own respective orbits. The target language is not considered "better". The student's vernacular is not considered "faulty".

3. Both programs tend to be structure-centered. That is, major attention is given to the grammatical structure of the target language or variety, not the vocabulary.

4. In both second-variety instruction and foreign-language instruction, the linguistic system of the target is presented to the student in a series of small steps, each step rising out of the one before.

5. Both programs emphasize habit-formation. Success is measured in terms of the student's oral fluency in handling the language patterns that are habitual among native speakers of the target language or variety.

In these five ways, among others, bilingual or second-variety programs have more in common with foreign-language programs than with "English" programs as we have traditionally looked upon that subject. There are also similarities apart from general principles and policies -- similarities in classroom techniques such as mimicry, repetition and substitution. That is, the children first hear, then say, a number of utterances which repeatedly stress the linguistic point featured in the day's lesson. The students then construct similar sentences which "fit the pattern", but they replace some or all of the words in the "model" with words of their own choosing. (3)

It is obvious that current programs for teaching standard English do resemble modern programs for teaching foreign languages to a great extent. The fact remains, however, that a second language variety is not a foreign language to Eli or to anyone else who uses English of any sort for everyday communication. Their English is not a foreign language and teachers had best remember that.
Not Foreign Language Learners

Because Eli doesn't perceive himself as a foreign-language learner, and he isn't, the procedures that have worked well in teaching English as a foreign language can't be carried over into a second-language variety situation without modification. Eli simply won't respond.

Take for example the mimicry - repetition - substitution sequence previously mentioned. Since English isn't a foreign language in Eli's mind and he already can respond to grammatically correct sentences used by standard variety speakers, he doesn't always give much attention to an exercise designed to solve his problem. It is not enough that the need is perceived by the teacher, Eli has to be able to see the need for himself. (4)

Teacher Techniques

Suppose the teacher has decided that most members of a class need practice on the verb ending in "ed", as in waited, wanted, needed, landed, etc., because the students seem to be saying things like "We wait a long time yesterday and he need a doctor last night." Before the class is asked to hear and repeat a string of sentences in which the "ed" inflection occurs, two or three minutes ought to be invested in finding out just which students need that sort of drill through an exercise that makes each of those students aware of his need. A simple means is the follows:

The teacher writes on the chalkboard: Every day we wait around. Next, the teacher announces: "I'm going to keep changing every day to some other time expression, like yesterday, or last week, or every morning, or three days ago." Depending on which time expression I say, you'll finish the sentence by saying either wait around or waited around. We're going to work fast. I'll call on you one by one, and I want you to finish the sentence immediately. There won't be time to stop and think. Are you ready? All right, every morning we ..., last Wednesday, we ... a week ago we ... every Tuesday we ... the summer before last we ..." (5)

As for Eli, the materials and methods that we've explored will work but there is one added necessity. Eli has grown to expect English to say something and he lacks patience with a bunch of sentences that merely make a point the teachers wants to get across, especially if nothing has been done to make him realize that he personally needs some work on that point.
A second language variety is not a foreign language. We've been reviewing a few of the many implications of that fact. Mainly they have been implications related to classroom techniques. But there is something much more important than any instructional device. That is the attitude of the teacher toward Eli and the other students, toward the total learning environment in which they interact.

Obviously the teacher of standard English as a second variety stands in a very delicate relationship with the students in the class. Take Eli for instance. Eli needs acceptance and approval to a degree, yet there comes a time when his teacher must let him know that the formulation he used isn't acceptable under all circumstances and help him face the disagreeable facts - the fact that he has yet to master the kind of English required for success in school. He has to learn to do a better job with the school register he already has. He has to become a successful bilingual person. It is a nasty fact, but a fact just the same. The fact that important decisions may go against him if he doesn't learn another way to speak. (6)

Importance of Teacher Knowledge and Attitude

But there is difficulty in all this. Somehow Eli has to be left secure in his own identity and self-esteem while learning to talk like someone else. How is this done? Evidently it can be done. Good teachers have always found ways of making changes in students without doing the child's spirit any damage. (7) Somehow Eli's teacher must avoid with all the subtlety he can muster divisive effects that will come from violating Eli's linguistic emotions. Quite apart from any pedagogical considerations about starting from where Eli is, the teacher has to avoid suggesting to Eli that somehow he is a poor human being, for it isn't so; but exactly what a disapproval of his language would suggest.

We're again back where we started - at attitude - but what is a healthy attitude for a teacher who wishes his or her students to be bilingual, and what is necessary for the formation of such an attitude? We'll start with the knowledge necessary. First, the teacher must realize that automatic adjustment does not take place in all cases. Even the successful middle class student does not always master the teacher's grammatical forms.

In the urban ghettos we find very little adjustment to school forms in most cases. Second, the knowledge of the non-standard vernacular will allow most effective teaching. For example, if the teacher knows the general difference between standard negative attraction and non-standard negative concord, he can teach a hundred different standard forms with relatively simple instructions. Third, the vernacular must be understood because ignorance of it leads to serious conflict between student and teacher. Any teacher who continually insists the i and e sound different in pin and pen will only antagonize Eli. (13)
Necessary Principles for Bilingual Program

Such knowledge might lead a teacher of Eli's to the point of which he would think it wise to build a bilingual program on the following principles: (7) 1. All children's language are equally sacred to them. 2. All language varieties are expressions of "in" and "out" groups and merely alternatives valued because of the changes visible in history. 3. Some language varieties are most useful for an individual if he is to operate in the wider society.

A teacher following such principles would be better able to attend to the elaborations which are built into Eli's language. It would be much easier to develop instruction that is consistent in method and content, to pick up clues to Eli's way of perceiving his world, a sensitivity to what aspect of Eli's speech can be added to and elaborated upon and a starting point for instruction, along with a positive regard for Eli's emotional starting base - his languae. (18)

The following is an excerpt from a discussion between Eli and his Principal as remembered by the Principal. This example shows the kind of understanding, knowledge, and attitude necessary on the part of a teacher to be able to pull off a successful bilingual program. (19)

About 9:45 a.m. one day, a small, wiry, shabbily dressed boy with large brown eyes came into my office. As I looked up, it was obvious that he was hosed down and deep in the mud (embarrassed and had a problem). Very quickly I got up and asked, "Why are you stretched so thin by joy? Are you flying backwards?" (Why are you so sad? Are you in trouble?) The boy took a cool view (looked up), cracked up (smiled) and answered, "My special pinetop (favorite teacher) is smoking (angry) and wants to eyeball (see) you fast." I said to him, "I'm stalled (puzzled). What is this all about?" He answered, "I wasted (punched) one of the studs (boys) for capping (insulting) me. Teach blasted (yelled) at me and told me to fade away (go) to the hub (office) and fetch you."

The principal not only shows an obvious understanding of what the boy is saying, but he also seems to see some healthy humor in it.

Additive Technique

Bilingualism will only be reached if the teaching techniques are approached from the "additive" rather than the "replacive" perspective. So often, Eli's teachers have thought their work with him to be "remedial", a matter of "improving" or "replacing" Eli's own language - they've had little success and Eli suffers for their failure. The materials selected haven't been selected with much care. Materials should focus only on areas which clearly deviate from the standard language, not on items which are "disputed usages" even within the standard system itself. (20)
Motivation is always important in a teacher's dealing with Eli, but in order to make him a functional bilingual it has to be an innate part of the methodology. Good teaching can in itself be a motivating factor. Eli has a good deal of respect for anyone who can do something very well - even a teacher. Eli isn't too inwardly motivated to acquire a second language variety by the enticements of "doors that will open" or by a picture of himself floating or swimming in the "mainstream" of American life - that somehow doesn't seem too real at the moment, but he might become involved in the festivities of a class that has been thoughtfully structured so that the classroom itself would be a source of motivation. Once a good teacher gets his interest, the inward motivation may follow. (21)

When we examine the source of most of the difficulties experienced to this point in developing a functional bilingual program in the schools, we uncover an attitude that makes the goal of language training to teach the "culturally deprived" child a different language and to proceed as if the children had no language at all. With any examination it becomes apparent that this description is more an account of the investigator's attitude toward the non-standard variety than a report of the child's verbal and logical capacities. (14)

Eli's Perspective of How to Approach the Standard Variety

It's of some interest to find out from Eli what he would do if he were in the teacher's position - how would he approach the teaching, or non-teaching, of a standard variety of language to children who were having a lot of trouble earning a living, getting a better education or living a better life? The first problem was to get Eli psychologically disengaged from his bias toward education as he had experienced it in relationship to discrimination in general and language discrimination in particular. So a hypothetical country was conjured up with all of the educational ingredients, but not the emotion-generating proclivities of home. Laputa was chosen. Eli was told to use his imagination but not play games; have fun with the mythical country, but try to handle the problem. If he was a teacher of Laputian in Laputian schools, how would he handle the predicament?

Eli thought that two things were somewhat clear. First, if so much depends upon being able to use a standard language, he would try to teach all kids to speak, read and write standard Laputian. He figured that only in this way, could he equip them to "make it" (whatever that is) in their society. Second, he'd rid the school of the scurvy of a silly myth that only standard Laputian is "correct" and "really is a language." He couldn't see how telling the kids that the variety of language they had learned before coming to school was "incorrect", the result of laziness and sloppiness, would win a whole heck-of-a-lot of cooperation. Besides, it's a bunch of bull anyway according to Eli.
When Eli decided that all kids should be taught standard Laputian, he provided himself a predicament. Should he teach them to speak Laputian instead of their non-standard variety; or should they be taught standard Laputian in addition to their non-standard variety? Now, there's danger here. In his eagerness to do "good", to prepare them for "success", it might first seem preferable to have them get rid of their non-standard variety altogether and to speak only standard Laputian. As we say, that's a possibility, but Eli didn't like it much. Just as a matter of morality, teaching everyone to speak just one way would be as objectionable as telling everyone to dress in the same way. It would be both prudish and wasteful. Again, a bunch of bull, according to Eli.

Eli pushed a point that hadn't been given much thought. If the school deprived a kid of his native dialect, he would be a stranger in his own home. His friends and family might stand in awe of him, thinking him to be awful, or they might make fun of him. In any case, he would have lost a precious jewel - his ability to communicate. So Eli decided that he would surely prefer to teach his pupils standard Laputian in addition to their variety. (15) He no more had to purge the kid of his home idiom to teach the standard one (which has varieties) than he would have to forbid playing the spoons to learn to play the piano. This language which is so very intimate a possession, can become just as much an enrichment to the school curriculum as the knowledge of and the ability to play different instruments is to a member of an orchestra. We're adding to, not paraphrasing, quite a bit on Eli.

Eli thought Laputa was a fun trip. The people were a little weird but the weather was good. They had catchy little slogans that kept him from being bored. One of them read "Laputa, Right or Wrong" and another said, "Laputa, Love it or Leave it", Laputa is a very symbol conscious country. Eli kind of liked "Laputa, Right or Wrong", but wasn't just sure of its real meaning and also got a tingly feeling from the colorful "Laputa, Love it or Leave it". You really get a feel for a country by watching the uses of its language, according to Eli. Perhaps Eli's explorations in Laputa might give rise to a few ideas to be used by educators here if they have a mind to.

Variety or Register Switching

For instance, in German-speaking Switzerland and in many other parts of the world, the problem of different varieties isn't cause for alarm, confusion or dismay. It's simply one of the recognized facts of everyday life. Realizing this, the teacher knows how to cope with it. He uses his twelve years of school to teach his pupil the standard language - not instead of their native variety but in addition to their variety. He teaches them how to become successful "variety-switchers" or "register switchers".
"The system works well, but can we adopt it in our own country? Perhaps, but there will be difficulty. In Switzerland, the teacher cannot only speak the standard language variety, he can also speak much the same non-standard variety as his pupils and does so in all normal daily uses of language outside the school." (16) The children raised in this country are very different, they are ashamed of their non-standard variety at times and never hear their teacher speak it because he doesn't know it, and wouldn't if he did. You see, it isn't proper.

It is now within our grasp to make it possible to both make it clear that non-standard English isn't something to be ashamed of and at the same time make standard English something worth learning, or at least working at. Maybe we can teach children to switch varieties just as they've learned to switch vernacular between the moments spent eating dinner with mother and fooling with friends.

Whatever has been proposed under the concept of Bilingualism, it is surely a curricular consideration for the schools and a philosophical predicament for all those related to education, children, teachers, parents, the communities they live in and the society which spawned them. Since it's impossible to separate man, his thoughts and his language, we are perhaps dealing with a societal ethos as well.

**Values of Educators**

In order to shift enough sand within the educational enterprise to allow it to accept different language varieties, standards, their grammars, pronunciations and vocabularies a change in what this enterprise places value upon is necessary. This is the point at which each educator must begin to figure out what each values and ask others to do the same. Any reorganization or reorientation of belief and behavior about language that results from such questions will be disruptive but it provides for new attitudes and knowledge. Education is in need of devices to force new alternatives to reveal themselves. (19)

At this juncture educators can't afford to run to what seems to be "practical" or to what theory makes to look fashionable. Instead, each of us should pursue as much knowledge - in this case about language - and then put what we know thoughtfully to use in the best interest of children like Eli.
BIBLIOGRAPHY


2. Ibid., p. 320.

3. Ibid., p. 321.

4. Ibid., p. 321.

5. Ibid., p. 322.

6. Ibid., p. 324.

7. Ibid., p. 324.


9. Ibid., p. 131.

10. Ibid., p. 131.

11. Ibid., p. 132.

12. Ibid., p. 133.


16. Ibid., p. 35.


18. Ibid., p. 10.


21. Ibid., p. 126.


23. Ibid., p. 305.

24. Ibid., p. 306.

25. Ibid., p. 306


27. Ibid., p. 307.

28. Ibid., p. 308.

29. Ibid., p. 308.

30. Ibid., p. 308.

31. Ibid., p. 309.

32. Ibid., p. 309.
SELF-TEST:  BILINGUALISM

1. Which of the following is the best summary of what happens to a minority group's language when the majority of a society has one language variety and a minority has another language variety? (circle one)
   a. Both groups respects the other's language
   b. The minority learns the language of the majority
   c. The majority learns the language of the minority
   d. Neither group learns the other's language variety

2. A recognition vocabulary can best be described as (circle one)
   a. the vocabulary one can understand, but unable to speak
   b. the vocabulary one can understand and converse in
   c. the ability to recognize a different vocabulary
   d. a vocabulary of prestige

3. A receptive knowledge of language varieties can best be described as (circle one)
   a. an ability to understand and speak different language varieties
   b. an ability to understand and recognize language varieties one can't produce
   c. an accepting attitude of other's language.

4. Which of the following statements of the relationship between bilingualism and instructional technique is true? (circle one)
   a. Bilingualism will only be reached if the teaching is approached from a replacive rather than additive perspective
   b. Bilingualism will only be reached if the teaching is approached by first correcting the student's speech.
   c. Bilingualism will only be reached if the teaching is approached from an additive rather than replacive perspective

5. Which of the following statements about language learning best describes successful variety switchers or register switchers? (circle one)
   a. A person who learns the standard variety of language instead of their native language variety
   b. A person who learns the standard variety of language, not instead of their native language, but in addition to their variety
   c. A person who learns the standard variety of language instead of their native language variety and can use it in the correct situation
   d. A person who learns the standard variety of language, not instead of their native language, but in addition to their variety and can use it in the correct situation.
6. For the purposes of language instruction as it relates to cultural diversity, such as the case with inner-city Blacks, which of the following represents the best definition of bilingualism? (circle one)
   a. When a student learns a foreign language
   b. When a student learns a new language
   c. When a student learns to understand and use a variety or register of language in addition to their native language
   d. When a student learns to understand a variety or register of language in addition to their native language

7. A teacher operates on the principles that (1) all children's language is equally sacred to them (2) all language varieties are expressions of "in and out" groups, alternatives valued because of changes visible in history and (3) that some language varieties are more useful for an individual if he is to operate in the wider society. These principles are illustrated by (circle one)
   a. a prescriptive, standardized method of language instruction developed to correct language deviations
   b. a sensitive to the language a student comes to the instructional situation with and a positive regard for the native language in the teaching of a standard variety.
   c. an attitude that one's language is personal and will serve in any situation

8. Directions: In the following items you are to judge the effects of a particular policy on bilingualism or the acquisition of the standard language variety by a Black non-standard speaker of English. In each case assume that there are no other changes in policy which would counteract the effect of the policy described in the item. Mark the item:
   A - if the policy described would tend to retard the acquisition of the standard variety of language.
   B - if the policy described would tend to help the acquisition of the standard variety of language.
   _____ 1. To teach the standard variety of English as a foreign language.
   _____ 2. To teach the standard variety of English, using some of the techniques of foreign language instruction but without implying something to be wrong with the child's native language.
   _____ 3. To encourage bilingualism by using the child's native language variety of English as a vehicle to teach the standard variety of English.
   _____ 4. To encourage bilingualism by using foreign language techniques in the instruction of variety of register switching.
   _____ 5. To teach the standard variety of English by first pointing out the deficiencies of the child's native language variety.
9. Directions: In the following items you are to judge the effects of a particular policy on bilingualism, or the acquisition of the standard language variety by a Black Non-standard speaker of English. In each case assume that there are no other changes in policy which would counteract the effect of the policy described in the item. Mark the item:
A - if the policy described would tend to **retard** the possibilities of bilingualism or acquisition of the standard variety of English.
B - if the policy described would tend to **help** the possibilities of bilingualism or acquisition of the standard variety of English.

   1. Wait until the students are in junior high school before confronting them with the acquisition of the standard variety of English.
   2. Start bilingual instruction of the standard variety of English in the first grade.
   3. Start bilingual instruction of the standard variety of English in the pre-school years.
   4. Begin the instruction of the standard variety of English to non-standard speakers in high school.

10. Suppose a non-standard speaking Black child is not showing an ability to switch registers or use the standard variety of English in the necessary situation. If a teacher successfully attempts to let the student know that the formulation he used isn't acceptable under all circumstances, what will be the approach used with respect to the student? The teacher will (circle one)
a. point out the fact that the formulation isn't acceptable in all situations, but make sure that the implication isn't made that the student or his language is substandard.
b. point out the fact that the formulation is incorrect.
c. not say anything and hope that the student will realize the difficulty and make the correction himself.
d. point out the fact that the formulation isn't acceptable in all situations and let the student know that the standard variety should be used in every situation possible.

11. "A" and "B" were arguing about the possibility of adopting a nationwide system of Bilingual education for non-standard speakers in the United States. "B" said that while he had no objections to teaching the standard variety of English to native non-standard speakers, he felt that it would be very difficult. "In the countries that have been able to successfully teach non-standard speakers to speak the standard variety in addition to their native language, the teachers also use the non-standard variety in some social situations. I think the difficulty with adoption of such a program is obvious."
Which of the following statements most nearly expresses the logical conclusion of "B's" argument? (circle one)

a. Adoption of a bilingual program for non-standard speakers of English is not possible in the United States.
b. Bilingual programs for non-standard speakers are not worthwhile.
c. If adopted, the success of such a program depends upon the teacher's ability to value and be able to use both the standard variety and the non-standard variety.
d. Adoption is either impossible or unnecessary.

12. Directions: Write a unified essay on the development of a bilingual program for the acquisition of standard English by non-standard variety speakers. Include the attitudes, attributes and methods necessary for a teacher to have success with such a program. Show some application of theoretical positions you have drawn from your readings or experience.

13. "It now is within our grasp to make it possible to both make it clear that non-standard English isn't something to be ashamed of, and at the same time, make standard English something worth learning or at least working at. Maybe we can teach children to switch varieties just as they have learned to switch vernacular between the moments spent eating dinner with mother and fooling with friends." Defend or attack the truth of the proposition above. In doing so, take into consideration specific conditions of teacher and student attitudes and background currently existing, and an evaluation of how the stated proposition might deal with these conditions.
SELF-TEST KEY AND REFOCUS

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APPENDIX C

Pre-Test

1. Which of the following is the best summary of what happens to a minority group's language when the majority of a society has one language variety and a minority has another language variety? (circle one)
   a. Both groups respect the other's language.
   b. The minority learns the language of the majority.
   c. The majority learns the language of the minority.
   d. Neither group learns the other's language variety.

2. Which of the following statements of the relationship between bilingualism and instructional technique is true? (circle one)
   a. Bilingualism will only be reached if the teaching is approached from a replacive rather than additive perspective.
   b. Bilingualism will only be reached if the teaching is approached by first correcting the student's speech.
   c. Bilingualism will only be reached if the teaching is approached from an additive rather than replacive perspective.

3. Which of the following statements about language learning best describes successful variety switchers or register switchers? (circle one)
   a. A person who learns the Standard variety of language instead of their native language variety.
   b. A person who learns the Standard variety of language, not instead of their native language, but in addition to their variety.
   c. A person who learns the Standard variety of language instead of their native language variety and can use it in the correct situation.
   d. A person who learns the Standard variety of language, not instead of their native language, but in addition to their variety and can use it in the correct situation.

4. For the purposes of language instruction as it relates to cultural diversity, such as the case with inner-city Blacks, which of the following represents the best definition of bilingualism? (circle one)
   a. When a student learns a foreign language.
   b. When a student learns a new language.
   c. When a student learns to understand and use a variety or register of language in addition to their native language.
   d. When a student learns to understand a variety or register of language in addition to their native language.
5. Directions: In the following items you are to judge the effects of a particular policy on bilingualism or the acquisition of the standard language variety by a Black non-standard speaker of English. In each case assume that there are no other changes in policy which would counteract the effect of the policy described in the item. Mark the item: A - if the policy described would tend to help the acquisition of the standard variety of language. B - if the policy described would tend to retard the acquisition of the standard variety of language.

___1. To teach the Standard variety of English as a foreign language.
___2. To teach the Standard variety of English, using some of the techniques of foreign language instruction but without implying something to be wrong with the child's native language.
___3. To encourage bilingualism by using the child's native language variety of English as a vehicle to teach the Standard variety of English.
___4. To encourage bilingualism by using foreign language techniques in the instruction of variety or register switching.
___5. To teach the Standard variety of English by first pointing out the deficiencies of the child's native language variety.

6. Suppose a Non-standard speaking Black child is not showing an ability to switch registers or use the Standard variety of English in the necessary situation. If a teacher successfully attempts to let the student know that the formulation he used isn't acceptable under all circumstances, what will be the approach used with respect to the student? The teacher will: (circle one)

a. Point out the fact that the formulation isn't acceptable in all situations, but make sure that the implication isn't made that the student or his language is substandard.
b. Point out the fact that the formulation is incorrect.
c. Not say anything and hope that the student will realize the difficulty and make the correction himself.
d. Point out the fact that the formulation isn't acceptable in all situations and let the student know that the Standard variety should be used in every situation possible.

7. A Register can best be described as: (circle one)

a. A degree of speech competence.
b. A level of grammatical competence.
c. A scale to gauge language variation between geographical areas.
d. A range of styles of language which are appropriate for a particular purpose in a particular situation.

8. The form of language most certain to be observed by outside researchers or teachers studying a Black child's language can best be described as: (circle one)

a. The School register.
b. The Non-school register.
9. "These children came from such an impoverished environment and are plainly culturally deficient. As a psychologist, and after what we've just experienced in our testing, it's evident that these children have received very little verbal stimulation at home." This best illustrates: (circle one)
   a. A viewpoint produced by the observation of children communicating at their best.
   b. A viewpoint produced by the observation of children communicating in an environment other than their home.
   c. A viewpoint produced by the observation of children who are deprived of a culture and talk very little at home.
   d. A valid view of most Black children's language.

10. If education continues to talk of verbal and cultural deprivation and the lack of logic in Black children's language, effort will be expended on the correction of: (circle one)
   a. The differences of the children rather than the defects of the educational system.
   b. The defects of the educational system rather than the differences of the children.
   c. The best interests of verbally different children.

11. Directions: In the following items you are to judge the effects of a particular policy on valid appraisal of a Non-standard English speaker's language and cognitive abilities. In each case assume that there are no other changes in policy which would counteract the policy described in the item. Mark the item: A - if the policy described would tend to give a valid indication of the child's language and cognitive abilities, and B - if the policy described would tend to give an invalid indication of the child's language and cognitive abilities.
   □ 1. Observation of the child's language behavior only in the school.
   □ 2. Observation of the child's language behavior at school and on the streets with friends.
   □ 3. Observation of the child's language behavior in a controlled clinical atmosphere.
   □ 4. Observation of a child's language behavior while playing verbal games with friends.

12. Suppose a teacher has the attitude that a child comes to school with no language at all and that it's doubtful that the child has the capacity for logical thought. If the child senses the teacher's feeling, what will be the child's probable language behavior with respect to the attitude held by the teacher? The child will: (circle one)
   a. Try all the harder to show his language and logical ability.
   b. Become motivated to learn the standard English.
   c. Be quiet, not wanting to exhibit what the teacher already feels about him.
   d. Only speak the language he learned at home to show the teacher that he can be logical.
13. Decisions of what differentiates one language from another or the amount of deviation from a "standard" necessary to constitute a dialect are: (circle one)
   a. quantitative decisions c. easily made distinctions
   b. arbitrary decisions d. scientifically discovered decisions

14. The two primary causes for language change are: (circle one)
   a. race and intelligence c. education and technology
   b. intelligence and technology d. isolation and time

15. Black communities are constantly expanding their lexicon and changing the meaning of their formulations so they can understand one another, but outsiders cannot. Language is also used as: (circle best answer)
   a. A defense mechanism and cohesive force of Black community
   b. A method of entertainment d. A cohesive force
   c. A defense mechanism e. An expression of "Blackness"

16. "The perceptions, thoughts, views of nature and the world in general on the part of any given group of speakers is organized for the most part unconsciously by their language." This best illustrates: (circle one)
   a. language difference c. language relativity
   b. language variation d. language change

17. Directions: In the following items you are to judge the effects of the stated policy on Non-standard Black speakers' ability to learn the Standard variety of English. Mark the item A - if the policy described would tend to help the acquisition of the Standard variety, B - if the policy described would tend to hinder the acquisition of the Standard variety.
   ___1. For the schools to assume variations from the Standard to be bad.
   ___2. To regard the dictionary, spelling book, and prescriptive grammar as the absolute authority in language.
   ___3. To teach the Standard by a "modeling" technique, copying the teachers' language.
   ___4. For teachers to learn to understand the Non-standard variety and use that knowledge to help teach the Standard.

18. Suppose a group of people thought that the sky was an inverted bowl of blue and that the "law of gravitation" doesn't make any sense at all - things don't fall because of a law, but because there is nothing to hold them up. Leaves aren't green because of chlorophyll but because they have greenness in them. The beliefs are plain common sense; they satisfy the needs because they are an adequate system of communication between the people in the group. If this information was presented to a linguist, what might he say about the intelligence of the people? (may be more than one response)
a. They are obviously not very intelligent.
b. They haven't heard of science and, therefore, aren't very bright.
c. Their language is reflective of a different world view than ours.
d. Their response is in no way indicative of intelligence or a lack of it.

19. Which of the following statements is most correct about the way children first acquire language?
   a. Each child is taught his language by those around him.
   b. Children learn language by themselves; by listening to others.
   c. Only bright children can learn language by themselves.
   d. Learning of language is mainly dependent upon genetic inheritance.

20. A grammar can best be described as: (circle one)
   a. A device or finite set of rules that generate an infinite number of correct sentences.
   b. An ability to recognize correct English.
   c. A way of speaking correctly.
   d. The rules of English recognized as correct by experts in the field.

21. Which of the following best represents the Language Acquisition Device necessary for language learning? (circle one)
   a. Competence → innate ability to → Linguistic performance of persons around the child
   b. Innate ability to construct a grammar → Competence → Performance → Linguistic performance of persons around the child
   c. Linguistic performance of persons around the child → Innate ability to construct a grammar → Competence → Performance
   d. Performance → Linguistic performance of persons around the child → Competence → Innate ability to construct a grammar

22. An educator wishes to find out whether there are intelligence differences between White and Black students. He administers a standard group intelligence test to all the students in the eighth grade of a large urban junior high school. He finds that on the average, Black students score 10 to 15 points lower on the test than White students. On the basis of the data the educator formulates a number of conclusions. Some of these are given below. Choose the one comment which might approximately be made in such an evaluation from a linguistic point of view.
a. The test is of little value and should not be used.
b. Care is necessary in such cases because cognitive ability is being judged on the basis of grammar that isn't necessarily shared by Black and White students.
c. White students are more intelligent than Black students by the fact that they both had an equal opportunity on the test and the Whites scored higher.
d. Black students are more intelligent than Whites because they scored so well on a test designed by Whites.

23. Suppose a child was surrounded by persons speaking two languages when small. If this language environment continued until age six, what would the relationship of the child's language competence and performance be to the languages he had been exposed to? (circle one)
   a. The child would most likely have competence and performance in only one language.
   b. The child would most likely have competence but not performance in both languages.
   c. The child would most likely become confused and not have competence or performance in either language.
   d. The child would most likely have both competence and performance in both languages.
   e. The child would most likely become confused and have performance but not competence in either language.

24. A Black child from an urban area receives a low score in a verbal intelligence test. The score he receives is most indicative of: (circle one)
   a. His innate ability to construct a grammar.
   b. His linguistic performance.
   c. His linguistic competence.
   d. The linguistic performance of those persons around him when small.

25. Linguistics can best be described as: (circle one)
   b. A way of behaving while you try to find out about language.
   c. A body of knowledge about language.
   d. A method of speech therapy.

26. Language can best be described as: (circle one)
   a. What is produced when one speaks.
   b. A constant, simple system, not dissectable into smaller components.
   c. A body of speech usages conducted in terms of a set of rules.
   d. A simple method of communication between groups of people.

27. "The forms and functions that a language takes have developed across an expanse of time and space, through constant variation, addition, deletion, selection, reorganization and modification of words and grammatical rules." This best illustrates:
   a. the stability of languages.
b. the haphazard way language comes about.
c. the lack of customary ways of speaking.
d. the way languages change.

28. Which of the following questions would a linguist be most likely to ask?
   a. which language sounds the best?    c. how is the language incorrect?
   b. how was the language acquired?    d. which language is correct?

29. Directions: The underlined statement at the end of the problem is assumed to be the correct answer. You are to explain the underlined conclusion by selecting one statement from the list following the problem.

   Problem: A principal walked into a classroom and asked a Black girl where her teacher was. The girl replied, "she bez gone." The principal thought the girl meant that the teacher was gone right at the moment. Instead, the girl meant that the teacher is, as always, out of the room. The principal didn't understand because:
   a. The girl had used poor English.
   b. The Principal didn't understand that "bez" means "is".
   c. The Principal's understanding of "bez" isn't the same as the girl's.
   d. The Principal didn't listen carefully enough.

30. Suppose that students continually use such phrases as "save money for dog food," "beware entering blood's crib," "she gone," and "Mr. Charlie", all of which teachers haven't heard before. What should the school's response be in terms of instruction?
   a. Get the students to stop using the Non-standard English and teach them Standard English in its place.
   b. Let the students use the language they want and not expect them to learn.
   c. Recognize the differences in language and help the students learn to use Standard English in addition to the language they now use.
   d. Help the students who ask for help and leave the others alone.
APPENDIX D

Post-Test

1. Suppose that students continually use such phrases as "save money for dog food," "beware, entering blood's crib," "she gone," "she be gone" and "Mr. Charlie," all of which teachers haven't heard before. What should the school's response be in terms of instruction?
   a. Help the students who ask for help and leave the others alone.
   b. Recognize the differences in language and help the students learn to use Standard English in addition to the language they now use.
   c. Let the students use the language they want to and not expect them to learn Standard English.
   d. Get the students to stop using the Non-standard English and teach them Standard English in its place.

2. Which of the following questions would a linguist be most likely to ask?
   a. Which language sounds the best
   b. How was the language acquired?
   c. How is the language incorrect?
   d. Which language is correct?

3. Directions: The underlined statement at the end of the problem is assumed to be the correct answer. You are to explain the underlined conclusion by selecting one statement from the list following the problem.

   Problem: A principal walked into a classroom and asked a Black girl where her teacher was. The girl replied, "she hez gone." The principal thought the girl meant that the teacher was gone at that moment. Instead, the girl meant that the teacher is, as always, out of the room. The principal didn't understand because:
   a. The principal didn't listen carefully enough.
   b. The principal's understanding of "hez" isn't the same as the girls.
   c. The principal didn't understand that "bez" means "is."
   d. The girl had used poor English.

4. Linguistics can best be described as: (circle one)
   b. A body of knowledge about language.
   c. A way of behaving while you try to find out about language.
   d. A method of categorizing sounds.

5. "The forms and functions that a language takes have developed across an expanse of time and space, through constant variation, addition, deletion, selection, reorganization and modification of words and grammatical rules." This best illustrates:
a. The way languages change.
b. The lack of customary ways of speaking.
c. The haphazard way language comes about.
d. The stability of languages.

6. Language can best be described as: (circle one)
   a. A simple method of communication between groups of people.
   b. A body of speech usages conducted in terms of a set of rules.
   c. A constant, simple system, not dissectable into smaller compon-ents.

7. Which of the following statements is most correct about the way children first acquire language?
   a. Learning of language is mainly dependent upon genetic inheritance.
   b. Only bright children can learn language by themselves.
   c. Children learn language by themselves; by listening to others.
   d. Each child is taught his language by those around him.

8. A grammar can best be described as: (circle one)
   a. The rules of English recognized as correct by experts in the field.
   b. A way of speaking correctly.
   c. An ability to recognize correct English.
   d. A device or finite set of rules that generates an infinite num-
number of correct sentences.

9. An educator wishes to find out whether there are intelligence dif-
ferences between White and Black students. He administers a stand-
ard group intelligence test to all the students in the eighth grade of a large urban junior high school. He finds that on the average, Black students score 10 to 15 points lower on the test than White students. On the basis of the data the educator formulates a number of conclusions. Some of these are given below. Choose the one com-
ment which might approximately be made in such an evaluation from a linguistic point of view.
   a. Black students are more intelligent than Whites because they scored so well on a test designed by Whites.
   b. White students are more intelligent than Black students by the fact that they both had an equal opportunity on the test and the Whites scored higher.
   c. Care is necessary in such cases because cognitive ability is being judged on the basis of grammar that isn't necessarily shared by Black and White students.
   d. The test is of little value and should not be used.

10. Which of the following best represents the Language Acquisition Device necessary for language learning? (circle one)
    a. Performance→Linguistic performance→Competence→Innate ability
    of persons around the child to construct a grammar
b. Linguistic performance of persons around the child → Innate ability to construct a grammar → Competence → Performance of persons around the child

c. Innate ability → Competence → Performance → Linguistic performance to construct a grammar → Performance of persons around the child

d. Competence → Innate ability to construct a grammar → Performance of persons around the child

11. Suppose a child was surrounded by persons speaking two languages when small. If this language environment continued until age six, what would the relationship of the child's language competence and performance be to the languages he had been exposed to? (circle one)

a. The child would most likely become confused and have performance but not competence in either language.
b. The child would most likely become confused and not have competence or performance in either language.
c. The child would most likely have both competence and performance in both languages.
d. The child would most likely have competence but not performance in both languages.
e. The child would most likely have competence and performance in only one language.

12. A Black child from an urban area receives a low score in a verbal intelligence test. The score he receives is most indicative of: (circle one)

a. The linguistic performance of those persons around him when small.
b. His linguistic competence.
c. His linguistic performance.
d. His innate ability to construct a grammar.

13. Suppose a group of people thought that the sky was an inverted bowl of blue and that the "law of gravitation" doesn't make any sense at all - things don't fall because of a law, but because there's nothing to hold them up. Leaves aren't green because of chlorophyll but because they have greenness in them. The beliefs are plain common sense; they satisfy the needs because they are an adequate system of communication between the people in the group. If this information was presented to a linguist, what might he say about the intelligence of the people? (May be more than one response)

a. Their response is in no way indicative of intelligence or a lack of it.
b. Their language is reflective of a different world view than ours.
c. They haven't heard of science and, therefore, aren't very bright.
d. They are obviously not very intelligent.

14. Directions: In the following items you are to judge the effects of the stated policy on Non-standard Black speakers' ability to learn the Standard variety of English. Mark the item A - if the policy described would tend to help the acquisition of the Standard variety, and B - if the policy described would tend to hinder the acquisition of the Standard variety.

___1. For teachers to learn to understand the Non-standard variety and use that knowledge to help teach the Standard.
___2. To teach the Standard by a "modeling" technique, copying the teacher's language.
___3. To regard the dictionary, spelling book, and prescriptive grammar as the absolute authority in language.
___4. For the schools to assume variations from the standard to be bad.

15. The two primary causes for language change are: (circle one)
a. race and intelligence. c. education and technology.
b. intelligence and technology. d. isolation and time.

16. Black communities are constantly expanding their lexicon and changing the meaning of their formulations so they can understand one another, but outsiders cannot. Language is also used as: (circle the best answer)
a. A defense mechanism and cohesive force of Black community.
c. A defense mechanism.
d. A cohesive force.
e. An expression of "Blackness".

17. "The perceptions, thoughts, views of nature and the world in general on the part of any given group of speakers is organized for the most part unconsciously be their language." This best illustrates: (circle one)
a. Language change. c. Language variation.
b. Language relativity. d. Language difference.

18. Decisions of what differentiates one language from another or the amount of deviation from a "standard" necessary to constitute a dialect are: (circle one)
a. Scientifically discovered decisions.
b. Easily made distinctions.
c. Arbitrary decisions.
d. Quantitative decisions.

19. Suppose a teacher has the attitude that a child comes to school with no language at all and that it's doubtful that the child has the capacity for logical thought. If the child senses the teacher's feeling, what will be the child's probable language behavior with
respect to the attitude held by the teacher? The child will:
(circle one)
a. Only speak the language he learned at home to show the teacher that he can be logical.
b. Be quiet, not wanting to exhibit what the teacher already feels about him.
c. Become motivated to learn the Standard English.
d. Try all the harder to show his language and logical ability.

20. Directions: In the following items you are to judge the effects of a particular policy on valid appraisal of a Non-standard English speaker's language and cognitive abilities. In each case assume that there are no other changes in policy which would counteract the policy described in the item. Mark the item A - if the policy described would tend to give a valid indication of the child's language and cognitive abilities, and B - if the policy described would tend to give an invalid indication of the child's language and cognitive abilities.

1. Observation of a child's language behavior while playing verbal games with friends.
2. Observation of the child's language behavior in a controlled, clinical atmosphere.
3. Observation of a child's language behavior at school and on the streets with friends.
4. Observation of the child's language behavior only in the school.

21. "These children came from such an impoverished environment and are plainly culturally deficient. As a psychologist, and after we've just experienced in our testing, it's evident that these children have received very little verbal stimulation at home." This best illustrates: (circle one)
a. A valid view of most Black children's language.
b. A viewpoint produced by the observation of children who are deprived of a culture and talk very little at home.
c. A viewpoint produced by the observation of children communicating in an environment other than their home.
d. A viewpoint produced by the observation of children communicating at their best.

22. If education continues to talk of verbal and cultural deprivation and the lack of logic in Black children's language, effort will continue to be expended on the correction of: (circle one)
a. The best interests of verbally different children.
b. The defects of the educational system rather than the differences of the children.
c. The differences of the children rather than the defects of the educational system.

23. The form of language most certain to be observed by outside researchers or teachers studying a Black child's language can best be described as: (circle one)
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a. The Non-school register.
b. The School register.

24. A Register can best be described as: (circle one)
a. A range of styles of language which are appropriate for a particular purpose in a particular situation.
b. A scale to gauge language variation between geographical areas.
c. A level of grammatical competence.
d. A degree of speech competence.

25. Suppose a Non-standard speaking Black child is not showing an ability to switch registers or use the Standard variety of English in the necessary situation. If a teacher successfully attempts to let the student know that the formulation he used isn’t acceptable under all circumstances, what will be the approach used with respect to the student? The teacher will: (circle one)
a. Point out the fact that the formulation isn’t acceptable in all situations and let the student know that the Standard variety should be used in every situation possible.
b. Not say anything and hope that the student will realize the difficulty and make the correction himself.
c. Point out the fact that the formulation is incorrect.
d. Point out the fact that the formulation isn’t acceptable in all situations, but make sure that the implication isn’t made that the student or his language is substandard.

26. Directions: In the following items you are to judge the effects of a particular policy on bilingualism or the acquisition of the Standard language variety by a Black Non-standard speaker of English. In each case assume that there are no other changes in policy which would counteract the effect of the policy described in the item. Mark the item: A - if the policy described would tend to help the acquisition of the standard variety of language, and B - if the policy described would tend to retard the acquisition of the standard variety of language.

___1. To teach the Standard variety of English by first pointing out the deficiencies of the child's native language variety.
___2. To encourage bilingualism by using foreign language techniques in the instruction of variety or register switching.
___3. To encourage bilingualism by using the child's native language variety of English as a vehicle to teach the Standard variety of English.
___4. To teach the Standard variety of English, using some of the techniques of foreign language instruction but without implying something to be wrong with the child's native language.
___5. To teach the Standard variety of English as a foreign language.

27. For the purposes of language instruction as it relates to cultural diversity, such as the case with inner-city Blacks, which of the following represents the best definition of bilingualism? (circle one)
a. When a student learns to understand a variety or register of language in addition to their native language.
b. When a student learns to understand and use a variety or register of language in addition to their native language.
c. When a student learns a new language.
d. When a student learns a foreign language.

28. Which of the following statements about language learning best describes successful variety switchers or register switchers? (circle one)
   a. A person who learns the Standard variety of language, not instead of their native language, but in addition to their variety and can use it in the correct situation.
   b. A person who learns the Standard variety of language instead of their native language variety and can use it in the correct situation.
   c. A person who learns the Standard variety of language, not instead of their native language, but in addition to their variety.
   d. A person who learns the Standard variety of language instead of their native language variety.

29. Which of the following statements of the relationship between bilingual and instructional technique is true? (circle one)
   a. Bilingualism will only be reached if the teaching is approached from an additive rather than replacive perspective.
   b. Bilingualism will only be reached if the teaching is approached by first correcting the student's speech.
   c. Bilingualism will only be reached if the teaching is approached from a replacive rather than additive perspective.

30. Which of the following is the best summary of what happens to a minority group's language when the majority of a society has one language variety and a minority has another language variety? (circle one)
   a. Neither group learns the other's language variety.
   b. The majority learns the language of the minority.
   c. The minority learns the language of the majority.
   d. Both groups respect the other's language.
APPENDIX E

Experimental Group Pre and Post Test Scores

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### APPENDIX F

**Control Group Pre and Post Test Scores**

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**Unadjusted Means**  
17.84  
17.92  
+.08
APPENDIX G

Critiques by users of "Linguistic Foundations and Cultural Diversity: An Instructional System."

On the whole I enjoyed the material and have benefited a lot from it.

I think more "Eli" examples should be included. The reader can identify with evaluations of his speech and cognitive abilities.

A lot of work has gone into the material and it is excellent. It is a very good learning system and worthwhile.

I learned a great deal from going over this learning material. I now understand many cultural diversity relationships in language I never was aware of before. I think everyone in Theory and Practice II should have taken this program. It was of great value to me, as I hope to teach in culturally diverse areas.

The first part of the material went pretty fast. The last two parts were a lot better to get into. I enjoyed the experience and feel I learned a lot.

The third section was not as readable as others. I had some difficulty getting through it. I felt I learned a lot of things I had never thought about. My awareness was increased by the material.

I feel this experience was a very helpful one and eye opening for me. It certainly made me aware of the differences in the English language and that more than likely a teacher would be faced with a situation such as some described. It was a real learning experience for me, both about myself and others. I enjoyed it, and thought it was extremely interesting and humorous at times. I was never bored and kept on going through the whole thing once I started, I was excited. I was glad to be included in the project.

The development of this material is overdue. I think that I learned, or was introduced to the non-standard variety of English and understand it better than before. The last two sections were very interesting.

This was a real eye-opener. As an English major, I found it particularly interesting.
I gained a great deal from this material. It would be valuable for everyone, particularly education majors. I know I won't remember all the details (definition of speech community, etc.) but I will remember the basic theories.

The two sections entitled "Registers" and "Bilingualism" were the most interesting and informative to me - offering practical and highly readable advice. The other sections were necessary as background material but tended to go a little slower for me.

The self-testing items were very good and covered the subjects thoroughly. I thought the program was very informative and was an enjoyable way to study the subject.