Because disadvantaged Spanish-American children were handicapped by limited language learning and inability to express themselves freely, a model for language training was developed and is being used in the primary grades of the Tucson, Arizona, public schools. The model is based on John Carroll's grammatical analysis and involves teaching children the skills of sentence transformation, sequencing, associating and categorizing. Since the children tend to speak in brief, telegraphic language, increased variety and control of verbal expression is a primary aim of the Hughes development model. Interesting curriculum activities, including trips and sensory experiences, are offered to provide stimuli to get children to talk. Verbal expression is elicited and reinforced by the teacher and her technical assistants. The teacher, herself, gains understanding of language structure and models. The child's own language output, in the form of stories or conversation, is tape recorded and used both for analysis and to provide feedback to the child on his progress. Comparisons of language samples taken in the autumn and in the spring provide some measure of growth. The teacher prescribes for and talks to a child on the basis of his demonstrated individual needs. Specific examples of teaching procedures are given. (MS)
THE MARIE HUGHES
LANGUAGE TRAINING MODEL

Research and Development Center, E.C.E.
National Laboratory for Early Childhood Education
University of Arizona, Tucson
The Marie Hughes Language Training Model

A unique and promising model for language training has been developed in the primary grades of the Tucson, Arizona, public schools, under the direction of Dr. Marie Hughes. The children in the program are Spanish-American children, many of whom were customarily assigned to so-called "one-seat" classes at school entrance, because they knew so little English. One-third of the children in such classes typically were not ready for first grade after a year, but had to continue in the "one-seat" for an additional year.

In initiating the project, researchers noted that in these special classes there were infrequent opportunities for language practice. Few individuals talked but the teacher; when the teacher asked a question, the children all answered in a chorus. There was little opportunity for using language to express ideas. In addition, it was noted that the children gave evidence of being afraid to participate in the school program, and that most teachers cited "shyness" as one of the factors entering into non-promotion.

The first language tests given to the children before the experimental program was begun showed that the children who knew the most English also knew the most Spanish, while the children who knew the least English were also poor in Spanish. Therefore it was decided that there would be no point in building a curriculum in Spanish, since the most handicapped children knew so little. While it was recognized that there is a psychological danger in selecting English, the language of the white ethnic majority,
as the vehicle of instruction, it was also recognized that the resentment of Spanish-Americans is more commonly directed against discrimination and against lower status, rather than against the English language.
A Description of the Model*

The Hughes model for language training might be described as the "natural" method systematized and accelerated. It is based upon a conviction that to acquire language competence, a child must interact with an adult who uses models of many syntactical elements in his speech, and who responds to the child's remarks in such a way as to extend the child's language. The adult also, ideally, reinforces the child continuously for his attempts to practice new syntactical discoveries and for his increased linguistic awareness.

To stimulate language, children in the Hughes program engage in many varied activities including trips, cooking, observation of animals, and physical science experiments. A child's remarks about these experiences are recorded verbatim, with all errors and deficiencies included, by the teacher, an assistant, or the child himself. A program assistant who serves as resource person or agent of change helps the teacher to analyze the sample and plan next steps. When the child's story is reread, the teacher, in conversation directed toward the child, includes utterances to serve as a model of the next higher level of language sophistication, asks questions to elicit the more sophisticated phrasing, and praises the child for his accomplishments.

*This description was written by Arline Hobson, Research Associate, Research Center, Early Childhood Education, University of Arizona, Tucson, with examples added by the Editor.
Let us see how the program might look in action. The children in a first grade immersed a sponge in water and observed the bubbles of air coming out of the sponge. "Coming bubbles out of the sponge," Bertha said excitedly. Hers and her classmates' remarks were recorded by the teaching assistant. The program assistant and the teacher decided in conference that the next language level for Bertha might be beginning a sentence with the subject and using a participle to describe the bubbles. Accordingly the teacher planned to model this type of construction for Bertha the next day.

Six-by-eight cards were prepared, with each child's remarks printed on an individual card, and with such phrases as, "Bertha said," or "Angie remarked," prefacing what the child had said. The plan was to have the teacher read the cards verbatim and then model the correct structure for Bertha. The teacher might say, "I saw bubbles coming out of the sponge also," and then proceed, by questioning, to elicit the use of the correct structure for the child. The same kind of language mediation is used in all aspects of curriculum work, and classrooms are full of "talking" murals with pictures and accompanying comments, individual books children have made containing pictures and their spontaneous remarks about a particular experience, and collections of stories by the whole class about a common experience. Thus the children are living in a language environment where their products are held in high esteem and form the basis of the work in reading and development of intellectual skills - all of which serves to reinforce for the child the importance of improving
his clarity of expression.

Growth in language control by the child is paralleled by his ability to think in increasingly discriminating ways, especially if his environment provides for language growth and intellectual development to be mutually stimulating. For example, certain forms of speech like the past tense are best learned if the adult reminisces with the child about an earlier experience such as a trip to the park; if the experiences were stimulating to the senses, there is also a chance to acquire adjectives or adjectival phrases. Such verbalization of recall provokes a variety of sentence transformations and provides practice in remembering, a skill disadvantaged Mexican-Americans lack.

If the remembering practice is directed systematically by a discriminating adult, it will also involve the skills of sequencing, associating, and categorizing, to mention a few. Children are helped to recall details in chronological order and record them in sequence - a skill highly important in learning to read, where anticipation of what might happen next helps one to figure out new words. It is a skill that also helps in making predictions. Children in the second grade peeled avocado, ate the fruit, and planted the seed. Not only was there deliberate retrieval of the experience by rereading their books, but along with the recall, a discussion about what was going to happen - what changes might occur in the avocado, recording of predictions, and playing them back during the next few weeks to check predictions.

Much use is made also of categorizing and associating. Children
are asked to describe the characteristics of objects they are observing in terms of shape, color, and size. There are many opportunities for comparison: "It's bigger than my hand," or "It's smaller than my fingernail." Questions about the origin of an object, its relation to other objects, and its sensory characteristics - how it smells, tastes or feels - also provoke language. Here is one of the stories:

We tasted clams.

Frank B. said, "We get clams from the ocean."

Sandy said, "Minced means that it's cut in little pieces."

Jose said, "It smells like fish."

Xavier said, "It tastes like meat."

Sally said, "It's salty. It tastes like fish."

The number of children who possess only a limited language structure at grade one, is sufficiently vast to challenge a school system to revise primary curricula, so that the children's acquisition of language may be accelerated. Such acceleration requires a plan for the primary teacher, who will probably at the outset, be unknowing linguistically, to arrange systematically for situations that evoke verbal interactions requiring all the basic predication types within a given block of time or experience, and that demand a wide variety of transformations with all their intrinsic intellectual meanings.

Of paramount importance is the teacher's consciousness of her role as a modeler of language and her increasing awareness of what language is, syntactically. She chooses to model patterns in order to evoke these
same patterns from the child and to arrange for the child to practice them within meaningful context. This consciousness is cultivated by the program assistant, who works in small groups with children, modeling for the teacher how she, in turn, can model for the children. With the reinforcing support of the program assistants, the teacher is helped to anticipate the language potential of a learning situation and to analyze retroactively the quality of an interaction situation (frequently recorded on tape recorder by an observer). The analysis of language is based upon a grammatical analysis developed by John Carroll (1965).

Carroll lists certain sentence-types which are basic English expressions. One such type is the There plus a verb phrase, plus a nominal (a noun, or a word used as a noun). This type of expression simply asserts the existence of something: "There's a rabbit." Another basic type is the predication type, where the basic pattern includes a subject and predicate. The constructions include 1) a linking verb plus a numinal ("It was Tuesday"); 2) a linking verb plus an adjective ("Her mother is sick"); 3) a linking verb with an adverbial telling where, when, etc. ("He's home"); 4) an intransitive verb taking no object ("He's swimming."); or 5) a transitive verb plus an object ("He killed a rabbit").

Carroll also includes as a type of English expression those that are not sentences. These might be greetings like "Hi!"; calls to get someone's attention, like "Hey!"; exclamations like "Ouch!"; or a response to another person, "OK".

Scholars of language differ as to what are the basic types of English expressions. Carroll's analysis was selected because he recognizes the
importance to communication of nonsentential expressions which characterize
disadvantaged children's speech. Often they talk in labels; they say, not
"It's a dog," but "Dog." Or their utterances are telegraphic, at a two-
year-old level, "See truck!" with no use of articles or adjectives. Carroll's
analysis was selected also because he attaches just significance to the "There
+ verb phrase" pattern extensively used by children, and because the basic
predication types he holds are easily understood by the teacher with the
usual background of school grammar.

In the Tucson study, Program Assistant and teacher analyze the
child's stories to assess the level of sophistication at which the child is
operating, and to determine next steps. The predication types in particular
are useful in studying the varieties of language control demonstrated in the
children's stories. These types form the basis of variations of language
patterns, and lead eventually to greater language control. They are used
in "kernel" sentences which are then transformed by adding, deleting,
transposing word order, or negating.

Grammarians have identified the kernels and have stated the rules to
account for every possible English sentence derived from the kernels.

The transformational rules fall into four major types:

1. Addition or expansion

For example: "I saw the sick boy" has two additions to Predication
Type 5:

(1) Past tense

(2) The adjective "sick" which could be expressed in another state-
ment.
2. Deletion or reduction

For example, the child might reply to a question asking if he had ever been to a particular location before, "Yes, I was," meaning "Yes, I was there."

3. Transposition

For example, a question "Are you ready?" is derived by permutation from the Predication Type 2, "You are ready."

Sentence inversion is another example. One can say, "Those dogs I like," rather than, "I like those dogs."

4. Negation

An existence-assertion can be negated by saying, "There isn't anyone here," instead of "There is someone here." Each of the basic predication types may be similarly negated.

It takes only a little reflection to perceive that a combination of such transformational processes accounts for some of our most complex forms of expression. For example, the participle, "curled," in the sentence, "I saw the snake curled in the corner," is an addition to the sentence, "I saw the snake," (Predication Type 5); it also represents a deletion in that only one sentence can then do the work of a possible second, "It was curled in the corner."

A summary of Carroll's analysis of types of expressions follows.
Types of English Expressions

I. Nonsentential expressions

A. Greetings, etc., Hi, How-do-you-do, Goodbye, So long, "over".

B. Calls and other attention getters (some of which can be inserted in sentences): Hey! John! Well.../oh/.

C. Nonsentential exclamations: Oh! Ouch! Golly! Damnation!

D. Nonentential responses to another speaker: Yes, no, O.K., m-um, Thanks, "Roger".

II. Sentence-types

A. Existence-assertions: The basic pattern is There + a verb phrase, the verb phrase including some form of the verb to be or occasionally one of a small number of intransitive verbs (come, occur, live), plus a nominal. Example: There is a problem here.

B. Predications: The basic pattern is Subject + predicate, with a Subject-nominal, and a Predicate employing one of the following constructions (all verb phrases):

1. Linking verb + Nominal: "is his sister", "was Tuesday".

2. Linking verb + Adjectival: "is sick", "was dedicated to truth".

3. Linking verb + Adverbial: "is home", "is in Paris".

4. Intransitive verb: "rains", "is swimming", "occurred", "exists".

5. Transitive verb + Object (s): "killed a rabbit", "received a letter", "gave him money", "elected him president".
In addition to analyzing how children are putting sentences together, and what help they may need in transforming kernels to the negative or other forms, program assistant and teacher also look to see how various parts of speech are used. Does the child use articles like "a" or "the"? Does he use nouns alone (snake), or does he attach adjective modifiers (long, skinny, green snake)? Does he use prepositions correctly to denote relations of space, time or logical position? Does he use auxiliary verbs?

How teachers apply the analysis is illustrated in the pages that follow.

Class A - Grade One

Class A is in a school in a disadvantaged neighborhood.

AUTUMN STORIES:

The children have visited Randolph Park and have illustrated in pictures what they saw there. Their stories are an explanation of their pictures.

Curtis' discussion of his picture is limited to mere labeling. However, the labels indicate an ability to name two forms of animal life not commonly discussed in Tucson child groups.

***

Angi limits her discussion to simple labels except for the use of a prepositional phrase to explain Joann's whereabouts.

***

Popcorn in bag and a turtle and me and Debra. Lillian and Joann in the swings. And the slide.

(Angi)
Sentence use in the form of Predication Type 1 appears in John's discussion, although in telegraphic form with some missing functors. John's sentences are used primarily to itemize labels.

***

Joann is either confused about what a trip is or she lacks control of prepositions. Her first two sentences are good, the first sentence being an example of basic Predication Type 4 and sentence two being an example of an existence-assertion. The last sentence is in telegraphic form, with the auxiliary omitted. Joann's growth in language control is still not stabilized for she uses an expanded for one time and a telegraphic form another time.

***

Luis uses two predication types competently. However, the sentences do not serve adequately to show whatever relationship exists in Luis' mind.

***

This is the cage where horse are and the cows. This is hill. Us on a hill and a plane and a duck.

(John)

People are riding to the trip on a bus.

There's a swing. People playing.

(Joann)

A farm, a bus and a elephant and a chicken. The bus is in the farm. The bus have a horse and a truck and airplane.

(Luis)
Jimmy's well-arranged question is one of the very few questions used by this group. He also used Predication Type 5 three times in the second sentence.

* * *

SPRING STORIES:

Each story was explanatory of a picture by an individual child depicting his idea of where he would like to live. Such discussion could be expected to evoke tentative thinking, retrieval of previous experiences to facilitate associations and the weighing of alternatives. Classification of dwellings supported by discrimination between kinds of dwellings might, also, be expected of the child. To discuss where one wants to live is an invitation to express affective involvement.

Patrick uses a number of sentences, all relevant to his desire to live in a tree house. Two of five possible predications are used. In addition, he can express tentativeness, use an adverbial clause of purpose, and express negation.

* * *

Leroy uses only a partial sentence. Nevertheless, he is discriminating and describing a house in some detail, using the noun adjunct "brick" and the adverbial clause "cause wind can't
come through."

***  

John can express causal relationships. I want to live in a snow house 'cause I like to play in snow and so I can little toys in snow. (John)

Nevertheless, some persistence of telegraphic forms suggests a need for corrective feedback and expansion in interaction situations.

***  

Simple labeling persists in Irma's story. A trailer. Because it's good. And a girl. And a grass and some water. (Irma)

The word "good" is without discriminating meaning, but it does carry positive affect.

***  

Curtis uses adverbial clauses of purpose, awkwardly, to be sure. There is an effort to express relatedness.

***  

I want to live in a trailer 'cause it has stairs. 'Cause it has wheels on and the car can take us in the mountains or downtown. It got a lot of windows. (Curtis)

***  

Wonder's language control includes an infinitive (noun) and an adverbial clause of purpose. Her second sentence with a passive verb is a more elaborate transformed sentence pattern.

***
- These children entered school with limited language control. Although there are existence-assertion, some predication types, and one question in the autumn stories, telegraphic speech persists.

- A situation can limit linguistic forms of expression. The autumn stories about a trip to Randolph Park resulted, primarily, in an itemization of labels. This labeling was limited largely to the common noun without any modifiers. Also, although the trip was completed, the children told about their pictures in the present tense, indicating a lack of control over tenses.

- The autumn stories show individual differences in ability to control language from Curtis (page 29) who used only labels, to Jummy (page 30) who used a question transformation and also a complete sentence with a compound predicate.

- More language control of basic sentence types appears in the spring stories than in the autumn stories.

- There are many clauses of purpose in the spring stories.

- More discriminating labeling is used in the spring stories with descriptive adjectives used both before the noun and after a linking verb.

- The spring stories use a number of infinitives.

- The spring stories, like the autumn ones, show diversity of ability to control language, from Irma (page 31) who persisted in simple labeling to Patrick (page 30) who used more varied structure.
Telegraphic forms are reduced in frequency in the spring stories, but they persist, nevertheless. The teacher must continue to model and provide corrective feedback.

The children need experiences to increase sensory awareness which will in turn evoke more descriptive language needed to identify characteristics of an object in more detail.

Increased language control will be reflected in more use of all five predication types, and transformations of these types as illustrated by the questions and passive verbs used by two students.

As the reader can see, the grammatical analysis is not a difficult or complicated one to make. It does serve to make clear the extent of the children's restriction in language at school entrance, and the ways language expression is restricted. As a result of making such analyses, the teacher becomes aware in a very specific way of children's language difficulties, and concerned about doing something about them. The grammatical analysis also helps the teacher to know what grammatical forms to model for the child. They become sophisticated in determining what might be done further to provide a "language lift," that is, to increase the complexity of language and to use more transformations. Becoming aware of the discrepancy between how the child is performing and how he should be performing through analyses of his language expression, is a necessary first step in teacher modification of behavior.

To summarize, the Hughes model may be described as based upon the following premises:
1. Spanish-American lower-class children entering school at six years of age are handicapped in language; they speak neither Spanish nor English well, and are reluctant to express themselves freely.

2. Interesting curriculum activities, like trips and experiences with food, can provide the stimulus to get children to talk.

3. Under conditions of positive reinforcement, children will increase their use of the English language.

4. The child's own language output in the form of stories dictated to the teacher or to a tape recorder can serve to stimulate the child to talk, and also serve as a source of feedback to the child on how well he is doing.

5. Fall and Spring comparisons of dictated stories or tapes help teacher and child feel progress and thus serve as reinforcement.

6. Teachers will be more aware of specific needs in language training if they have a knowledge of how language is structured.

7. Teachers can use their knowledge of how language is structured to make diagnoses of pupil needs and plan specific activities to improve language.

The Program in Action

To ask an experienced teacher to think about her own talking and to think about the intellectual significance of her talking, could be very threatening. The technical aide, the program assistant, is at this point, essential if consciousness of language modeling is to culminate in an acceleration of the child's control of language.
Less threatening than the interaction analysis is the possibility of analysis of dictated stories. But, Jose, a first grader, does not enter school able to become the author of a dictated story. Jose first finds his gratification in discovering an adult listener. The teacher structures the environment so that Jose has stimuli to which he can respond. The teacher, or the aide, or the program assistant in turn are observing his verbal behavior and are quickly available to respond to his verbal initiative with interest, acceptance, and with comments or questions that invite Jose to explore further, and to verbalize more. The adults are carefully trained to be observers of the child and to find increasingly effective ways to couch their verbal response to the child so that openness to further exploration ensues.

Jose, entering his classroom one day, will see on the door a large printed chart with big red and yellow apples on it. How he wishes he could figure it out. It must be something about apples. He thinks he sees "apple" on the chart. The teacher reads it to the class: "Good morning, boys and girls. Today we will taste apples."

They tasted apples but not until everyone looked at them, touched them, smelled them, and told about seeing apple blossoms. Jose had even climbed an apple tree. When they cut into the apple and discovered its texture, the juiciness, and its degree of sweetness or tartness, the verbal interaction was guided by a participating and modeling adult to more complex language forms and to a more discriminating lexicon.

The next day Jose may discover on the classroom wall his very own picture of the apples accompanied by a speech balloon with his
very own comments such as: Jose said: "Apples good. I like." The giant talking mural with the children's own pictures and comments are not resisted as text-books. In fact the children hardly know whether the teacher read it to them or whether they read it themselves, so closely are they identified with the experience.

So soon, a new mural appears about going to the store to buy apples and sugar for the applesauce they will make, and the tasting mural is reorganized into a big book for the library center which they'll read and reread.

Another day as the children examine photos of a trip to the park and listen to the taped record of their conversation about the ducks on the pond, Jose may suggest it ought to become a mural or a book, and he may even offer to do some illustrations.

The situation inevitably arises when the same child wants to dictate his very own story for his very own book. Another day arises when Jose wants to write the story himself and there will be an appeal to an adult to let him dictate it so that it can be printed for him to copy.

The teacher structures carefully so that experiences like a walk, a trip, cooking, tasting, smelling, feeling, grouping, building, or role playing provoke intellectual involvement and give rise to verbalization. Dr. Hughes has outlined possibilities for using experiences for both intellectual stimulation and language development. Below are examples of how curriculum experiences can be used to develop and express sensory awareness and to build a concept of time.
Experiences Which Will Awaken and Develop Sensory Perception

Goals

1. To develop an awareness of his own senses of sigh, smell, hearing, taste and touch.  Ex: I smell gasoline.

2. To become aware of the individual senses - Which is a smell?  What is a sound?  How do you know something is sour?  Can we tell a truck from a car with our eyes shut?

3. To learn to differentiate between sounds, smell, etc. - between loud and soft, between rough and smooth, hot and cold, sweet and sour, stiff and flexible.

4. To describe information received via the senses.  Ex: The truck is big, noisy, and smells like gasoline.

5. To associate new sensory information to previous experience.  Ex: Cinnamon smells like apple pie.

6. To categorize sensory information.  Ex: These things are sweet. Jets and trucks make loud noises.

7. To compare sensory information.  Ex: "Softer to sit in the sand than on the rock."

8. To relate personally to sensory stimuli.  Ex: I like perfume. Sweet things taste good.

9. To attempt to control or change sensory stimuli.  Ex: "Put on sugar to make it sweet." "The record player is too loud.  Turn the sound down."

10. To anticipate sensory stimulation.  Ex: "The rock will feel warm because the sun is shining on it." "Does the flower smell good?"
11. To become aware of and gain the skills necessary for responding to sensory stimuli in a variety of ways. Ex: "The music makes me want to dance."

Using Cooking Experiences to Awaken and Develop Sensory Perception

1. Call attention to smells of different kinds of food, the smell of cooking food.

2. Provide experiences with food.
   a. The feel of dough.
   b. The stickiness of jelly.
   c. The sound and sight of things boiling.
   d. The feel of heat from the oven.
   e. The feel and taste of ice cream on the tongue.
   f. The sounds of different animals.
   g. The feel of windblown sand.

2. Study and imitate movements.
   a. The movement of different animals - Does the cow move like the deer? How does the turtle move? Can you move like a fox?
   b. The movement of the wind in the trees.
   c. The working of machines.

3. Discuss reactions to things we experienced.
   "The monkeys made us laugh." "When the bull started to get up, I got back."

4. Express personal feelings about experiences - How do you feel after climbing a hill? The road goes up - my stomach goes up. The road goes down - my stomach goes down.
5. Take pictures of individuals or small groups in action, especially children, during the trip. Talk about how they felt at the time. What are they saying? What made them say it?

6. Use songs, published or those made up on the spot, to describe sound, motion, feeling, etc. "The bus goes bumpity, bumpity bump-bumpity, bumpity bump."

Experiences Which Lead to the Development of a Time Concept

Goals

1. To differentiate between now and not now. "We can't play with the blocks now, but we will this afternoon." "Recess is over. Now it is time to come inside."

2. To become aware of time as change. Tomorrow becomes today. Today becomes yesterday. Tomorrow is the day after tonight.

3. To develop the ability to place an event in time. "This happened before I came to school." "Will you read me a story after you finish playing the game with Manny?"

4. To become aware of and anticipate the future. "I am next." "Our University friends come on Wednesday." "I'm going to be a mother when I grow up."

5. To perceive oneself as having influence over future events. "I won't let anyone knock down our tower." "We keep the eggs warm so they will hatch."

6. To develop an awareness of the past. "We baked cookies this morning." "Yesterday we went to the bakery." "I couldn't talk English when I was a little kid."
7. To develop the ability to recall and reconstruct the past. "The policeman let us sit on his motorcycle." "We planted the seeds and waited a long time. Then they came up."

8. To develop the ability to put events into sequential order. "First we went to the store. We bought vegetables. Then back to school. We made soup. And then we ate it."

9. To become aware of common sequences in everyday life. "Today is Friday. Tomorrow I won't come to school. Then Sunday. And back to school. That's Monday."

10. To become familiar with the various methods of measuring and recording time. "Our walk was almost an hour long." "The calendar says it is ten days until Halloween." "Last summer I went to Headstart."

11. To develop an awareness of the importance of time in our society. "The bus was late." "It is time for the train to get to the station." "Our puppet show will be at 2:00." "If we are not ready at 10:00, the bus will leave us."

12. To develop an awareness of the role anticipation of the future-planning plays in our society. "The doctor has medicine in case any children get sick." "My brother has to practice his horn now so he can get in the band.

13. To develop an awareness of the relationship between present behavior and future consequences. "If we play the game, there will be no time for the story." "I watched T.V. too long and it made me late to school. I didn't get her in time to taste the surprise."
Using Walking Trips to Develop Time Awareness

1. Record starting time of walk. Compare with returning time.
2. Decide what time the group must start back. Let one or two children be the "clock watchers." (This is a good way to allow the child who can tell time use his skill and give status to time telling at the same time.)
3. Look for clocks, calendars, etc. in public places.
4. Reconstruct what happened on the walk by reading the conversations recorded by the teacher during the walk. "What was happening when Mary said this?"
5. Put the events of the walk in sequential order.
6. Watch the traffic lights or a policeman directing traffic. Observe the timing.
7. Plan to visit the home of a child at a certain time. Perhaps an invitation could ask them to come at one o'clock. Decide when to start to get there on time.

Using Bus Trips to Develop an Awareness of Time

1. Plan to meet the bus at a certain time. Record the time. Be sure that everything is ready to go at that time. Make being on time a group affair.
2. Observe and point out signs which give the opening and closing times of public places - museums, stores, etc.
3. Ask the custodian, farmer, etc. which jobs must be done daily, weekly, etc.
4. Point out the schedules kept by trains, busses, and planes. Why do they run on schedule?
5. How long does a trip take us? Record the time.

6. Plan ahead for the trip. Mark off the days on the calendar. Make and carry out plans for the trip.

7. Anticipate what you think you will see-and do.

8. Put the trip into a time orientation. "We are going on the trip tomorrow. Today is the day for our trip. We went on a trip yesterday."

9. Reconstruct parts of the trip in one or many ways - talking about it, dramatic play, drawing pictures, etc.

10. Take pictures of the trip. Put them in order and write about them.

11. Observe the speed of the bus. Is it fast or slow? When does it get faster or slower? What is faster? How do we know?

12. Visit the city yards. How does the city keep all the equipment ready?

13. Let the children know that prior arrangements must be made before a trip. The teacher may say, "I went out to Sabino Canyon Sunday. There is a stream where we can wade." Or - "If we are going to take a lunch, we will have to make sandwiches. When shall we do that?"

14. A trip to a museum or other spot which has "old things" helps the child to become aware of history - the past - the "olden days."

Using Cooking Experiences to Develop Concept of Time

1. Time the cooking or baking. Read the time from the recipe. Set the timer. Then check it by the clock. Does it go off at the expected time?

2. Experiment - Cook something too long or not long enough. What happens?

3. Point out the necessity for planning ahead. What utensils will we need? What supplies will we need to get?
There are many other facets of the Hughes program that might be described—how intellectual competencies other than those mentioned are developed through the medium of language; how the children learn to read; what the impact of the program is upon children's motivation to learn and their self-image. And, since all facets of the program are relevant to language, much that would have a bearing on the subject-matter of this Handbook has been omitted. It is hoped, however, that the theory underlying the model is complete enough to be helpful to teachers seeking to develop promising practices in language training.