HELEN F. ROBISON
Assistant Professor of Education, Teachers College, Columbia University, New York, New York

ROSE MUKERJI
Assistant Professor of Education, Brooklyn College of the City University of New York, Brooklyn, New York

LANGUAGE, CONCEPTS— AND THE DISADVANTAGED

ONE day, the kindergarten class was cooking chocolate pudding with ingredients the children had purchased while the teacher helped them verbalize the process. After the pudding was eaten, when the children were interviewed either singly or in pairs, their language responses to questions about the event were meager.

Two children were unable to state how the pudding mixture had changed. Another child described the cooking procedure by saying, ". . . we cook it in the oven," unable to find more precise words. One child, unable to describe the color of chocolate pudding, said it was, "Like a 'crane' (crayon)—that you write with. The color of a 'crane'!" Generally, the children's descriptive efforts resulted in little communication.

The lack of names, labels and descriptive words in this class of disadvantaged kindergarten children in a New York City public school contrasts sharply with the comparative abundance of descriptive language in a middle-class kindergarten group in a Brooklyn parent-cooperative nursery school. In this latter group, after a comparable experience during the same period, language responses showed much more development. Children used such descriptive words as, "a darker color brown," "thick," "bumpy," "tastes like sherry ice cream," "tastes like cooked dog," "it's trying to be black" and "it's almost 'mustid' soup." This group was notable, also, for its uninhibited use of bathroom language to make some obvious, humorous associations.

While research studies are emphasizing the preschool and early school years as the critical period for language and beginning concept development, mere attendance in classes and exposure to the conventional kindergarten curriculum have not been sufficient to compensate disadvantaged children for early deprivation. Within the larger requirements for social and economic improvement, these children appear to need a carefully constructed school program with some power to reverse the apparently growing educational gap between them and their middle class counterparts.

Experimental Kindergarten Program

In an effort to devise a curriculum to meet the educational needs of dis-

advantaged kindergarten children, an exploratory study was undertaken by the writers in the Spring 1964 term in a kindergarten class in a "special service" public school in Brooklyn.[1] The ethnic groups represented were Negro, Puerto Rican, Jewish, Greek, Italian, and Chinese.

Concepts and Skills

The project was carried out in a context which recognized the important contribution of child development to programs for young children and which retained many desirable features of existing kindergarten programs. The project also included some aspects directly related to the special needs of disadvantaged children.[2] The program was constructed to emphasize language growth, concept development and symbolic representation. Through a curriculum rich in intellectual stimulation, diverse opportunities for manipulative and play experiences, an environment featuring verbal and nonverbal symbolization, and structured experiences, the teacher hoped to guide children toward more efficient learning strategies.

The sources of intellectual stimulation were selected concepts from some of the social science disciplines and mathematics. From the social sciences, three major concepts were selected: interdependence and specialization as characteristics of our society and cultural pluralism as a value of our democratic society. These concepts were not to be taught to the children, but represented the learning goals of the program. The study was specifically concerned with guiding children toward verbal forms of communication, generalization and logical thinking. The mathematics concepts selected for study were one-to-one correspondence, cardinal numbers and enumeration, numerals and denominations of money.

To broaden the children's ability to gather information and to process it more adequately, the study also sought progress in children's awareness of and ability to use various forms of symbolic representation. Maps, signs, labels, tallies, numerals and arbitrary symbols were incorporated as an integral part of activities and play.

Language Learning Strategies

Study of the disadvantaged children's language indicates that, while their most important need is for a larger, functional vocabulary, other language needs include fluency and more standard forms of syntax, enunciation and pronunciation. Analysis of the children's language confirmed findings of Loban that vocabulary and proficiency in language appear to be related at the kindergarten level and that children from low socioeconomic levels can be distinguished even at this early grade by lower scores.[3] However, the children were more verbal and fluent in their spontaneous play and conversations than in structured interviews with the researchers.

Language was conceived as man's essential means of encoding and decod-

[1] The New York City Board of Education designates certain schools as "special service" schools because of various factors indicating economic disadvantage.

[2] This study was supported in part by a grant from the U.S. Office of Education. Project Number S-320.

[3] Walter Loban. *The Language of Elementary School Children.* Chicago: National Council of Teachers of English, 1963. p. 88.

ing experience, of understanding and communicating ideas, feelings, attitudes and needs. Therefore, all language activities were planned as integral parts of activities which were either direct experiences, forms of play or manipulation of things, or structured experiences involving some or all of these elements.

For example, the teacher verbalized the chocolate pudding experience while it was in process. Emphasizing her language as a model, she told a story to the class about the chocolate pudding experience and tape recorded it. The story was duplicated in the form of a booklet, with several blank pages for illustrations by the children to serve as story cues as they "read" it to each other. The teacher sent a note home with these booklets requesting parents either to read the story to the child or to ask the child to "read" it to them. Finally, the taped story was available for individual listening through headsets plugged into the tape recorder at school. Valuable as this repetition and practice was, it was insufficient, so new teaching strategies were designed through practice games with telephones and other audio-visual devices.

Concept Development

To help children make a beginning toward understanding the key concepts of specialization and economic interdependence, the topic, "Providing for Families' Food Needs," was selected, with the recognition that other topics could be equally effective. A class grocery store provided much interesting activity for playing various interdependent roles. It soon was evident that children lacked some fundamental concepts of classification. They mixed empty food cartons, canned goods and cereal boxes indiscriminately and made no effort to classify them in conversation or in fact.

Several teaching strategies were developed to try to advance their conceptual growth toward classifying and categorizing. For example, a trip to a supermarket focused on the question, "How do we know where to look for the things we have to buy?" Each child had a shopping "list" of food items his mother had ordered, such as raisins, jello and canned pineapple. The teacher used question cues, such as, "Where shall we look for the sliced pineapple? Over in the produce section with the apples and other fruits?"

"No, no," said Steve, "It's in a can. We have to look where the cans are."

"I see beans and corn and other vegetables," remarked the teacher. "Is this a good place to find pineapple too?"

"I think it's there," said Sylvia. "It's in the 'fruits.' "

A congenial grocery clerk who was stocking the shelves told the children that his job was to keep the shelves filled with foods in the different categories and to keep them neat and attractive. Leila stated her understanding of his job as, "He puts all the cereal with the cereal and all the pineapple with the canned fruit."

A further effort in classification was undertaken when the teacher decided to close the store so that the children could stock the shelves afresh, using classifications similar to those encountered in the supermarket. As a result, many children had considerable practice in classifying as they attempted to find

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the correct category for each item. Shortly after the play store was reopened for business, the following transaction was recorded:

"Gimme some boxes o' Quick," ordered Rowanda, who was playing customer. Giuseppe, the storekeeper, searched among the canned goods.

"You don't look for Quick in the canned fruits," Rowanda instructed the storekeeper. "It's not a fruit or a vegetable. It's something to drink. There it is! See—with the coffee."

Giuseppe went directly to the carton-shelf which held cans and boxes of drinks and handed Rowanda two boxes of Quick.

Gradually, an increasing number of children tried to replace foods by category at clean-up time and used classification terms with greater frequency and accuracy. But teacher intervention was clearly needed with this class, in contrast to findings of a study in which middle-class kindergarten children discovered, for themselves, the need to classify foods in their store play for more satisfying results.[4]

Symbolic Representation

There were many examples in the exploratory study of the children's ignorance of various symbols or of the meanings or uses of symbols, which appeared to restrict their ability to gather information or to process it adequately.

One day, while playing store, the children were confused about two similar empty paper cartons, one of which had been a milk container, the other a container of orange juice. They took them to the teacher for clarification and she directed them to look at the picture on each carton which furnished excellent clues. Unlike middle-class children, whose parents usually orient them early to such obvious symbol meanings or uses, these children were ignorant of this important source of information.

The utility of words and nonverbal symbols was featured in numerous ways in the exploratory classroom. Shopping lists, signs, labels, prices and conventional and arbitrary symbols were introduced in many ways. The emphasis on symbols was not to develop a systematic program of early reading, but was a planned attempt to increase children's alertness to the function of sym-

[4] Helen F. Robison. "Learning Economic Concepts in the Kindergarten." Unpublished Doctor of Education Report. New York: Teachers College, Columbia University. 1963.

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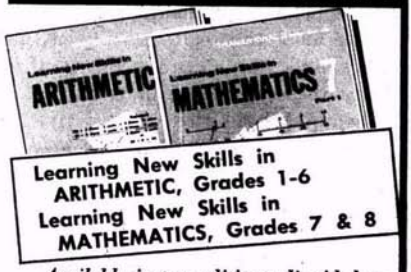

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bolic representation in securing, storing and utilizing information. As the study progressed, children showed greater awareness of picture clues, numerals and words, and pride in their ability to recognize or to "read" them in their play and structured activities.

Findings

The utility of specific, preselected learning goals was underscored in many ways in the study. The classroom teacher saw many possibilities for program in moving toward these goals, investing much creativity in selecting and devising materials, activities and experiences which she could see as specific aids to all or some children in the group.

The study suggested the need for kindergarten programs to focus sharply on the kinds of learning goals which seem most needed by disadvantaged children. While it was clear that young children's play activities must not be curtailed, it was equally clear that their play opportunities can be much wider than in most kindergartens, with much more direct experience from which to spin the fabric of imaginative play and from which to play roles observed in the real world of adults. Unless these children can enlarge their vocabularies through personally-gleaned information, there seems little possibility for real progress in understanding.

One challenging implication of the study was the support it gave for the more active role for teachers in stimulating new activities and for building bridges between children's purposes and the intellectual goals of the school, while working within established principles of child development.

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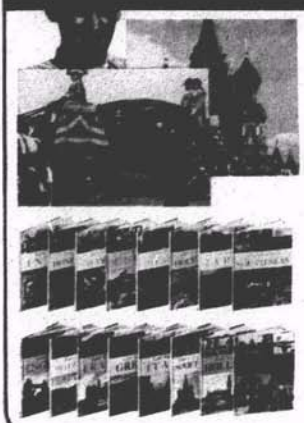

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