The Responsive Model program assumes that the school environment should be designed to respond to the learner, and that school activities should be autotelic, or self-rewarding, not dependent upon rewards or punishment unrelated to the activity. Developmental theory, certain ideas of operant conditioning, and flexible learning sequences are used in the program. Major objectives are: (1) to help children develop a healthy self-concept, and (2) to develop children's intellectual ability, specifically, the ability to solve problems. Another objective is to give the child an understanding of his cultural background. The program has been used with low-income minority group children, and with some middle-class white children, preschool through grade 2. Curriculums and programs for Head Start and Follow Through classes are described. Parent participation in administrative decision-making and in the classroom is encouraged. A Parent/Child Program teaches parents how to teach their children through the use of toys and games. An Inservice Program trains local program advisors, who train teachers and assistants. Ongoing evaluation studies effectiveness of training program, children's growth, and development of new ways to assess self-image and achievement. (Author/HP)
OVERVIEW OF RESPONSIVE MODEL PROGRAM
Glen Nimnicht
ORIENTATION

The Problem

Our program for Head Start and Follow Through is based on the assumption that the public schools are failing large numbers of children because they are not responding to children as individuals with different cultural backgrounds. The schools are currently designed to serve students who are reasonably quiet and submissive, and who hold the same values as the teachers. Either they are white, middle-class children or they emulate white, middle-class adults; the schools nurture these children and aid their intellectual development. Our program is based on the idea that if culturally different children are to thrive either they must be helped to operate in a system designed for others, or the system itself must be changed to serve all children equally.

The Approach

The central idea of our Responsive Model program is that a school environment should be designed to respond to the learner. The activities within the environment are autotelic; that is, they are self-rewarding and do not depend upon rewards or punishments unrelated to the activity.

This learning environment satisfies the following conditions:

a. it permits the learner to explore freely;
b. it informs the learner immediately about the consequences of his actions;
c. it is self-pacing, with events occurring at a rate determined by the learner;
d. it permits the learner to make full use of his capacity for discovering relations of various kinds; and,
e. its structure is such that the learner is likely to make a series of interconnected discoveries about the physical, cultural, or social world.

The program is not based on any single theory of learning since there appears to be no single theory that adequately accounts for all the ways children learn. The program does, however, draw from many different theories. Much of the program is based on the assumption that there is a relationship between maturation and learning, although this relationship between maturation and the learning of specific skills or concepts is not altogether clear.

Although the program is based more heavily on the work of developmental theorists, we also find some of the ideas of operant conditioning useful. For instance, to define objectives in clear behavioral terms is sometimes useful, but we do not believe that every objective can be defined in behavior which can be immediately observed. We think in terms of reinforcement of learning and feedback to the learner. We use intrinsic reinforcers in autotelic activities instead of extrinsic reinforcers. We believe that a wide variety of autotelic activities are necessary, since no one activity is rewarding to all children. This is consistent with the behaviorists' notion that a varied reward system is necessary to reinforce learning.
While we develop learning sequences, we do not assume that every child must follow that sequence. In many instances we do not claim to know how the learning of a particular behavior contributes to the future learning ability or achievement of a child. This has sometimes been described as a "sandpile theory of learning"; that is, we know that it takes a tremendous number of grains of sand to support more sand. But we are not at all certain which grain of sand is necessary to support the next one. And, as the analogy implies, we are not certain that any particular grain is necessary -- others could be substituted and still support the sandpile.

The program is suitable not only for low income or culturally different children, but for all children.

The Objectives

The major objectives of the program are to help children develop a healthy self-concept as it relates to learning in the school and in the home; and to develop their intellectual ability, specifically, the ability to solve problems. In order to do this the child must develop his senses and perceptions, since the senses are the source of data for the thought process; his language ability, because language is a tool of the thought process; and his concept formation ability, because he needs to be able to deal with abstractions and to classify information to organize thought.

A child has a healthy self-concept in relationship to learning and school, if:

a. he likes himself and his people;

b. he believes that what he thinks, says, and does makes a difference;
c. he believes that he can be successful in school;
d. he believes that he can solve a variety of problems;
e. he has a realistic estimate of his own abilities and limitations; and,
f. he expresses feelings of pleasure and enjoyment.

After being in the program two or three years, most children should be able to:

a. recognize, complete, extend, and discover patterns in one direction;
b. recognize, complete, extend, and discover patterns in two directions (matrix games);
c. recognize, extend, and discover rules from examples (inductive thinking);
d. persevere, concentrate and succeed on problems involving the breaking of "set";
e. adapt to games involving rule changes;
f. eliminate what is known to determine what is unknown;
g. use feedback productively to modify actions;
h. solve verbal and math puzzles;
i. seek a solution to one-person problems without assistance;
j. recognize that a problem cannot be solved with information at hand;
k. anticipate the probable response of the other player in interactional games;
l. anticipate the probable response of others to alternative actions of the individual in some social situation; and,
m. cope with the emotions of other individuals.
The other important objective is that the child have a knowledge and understanding of his cultural background. We will not only have to develop more materials to obtain this objective but develop different criterion for measuring the success of children from different backgrounds.

POPULATION

The program has been used with low-income children, mainly black, Mexican-American, other Spanish-speaking children, and American Indian, as well as some white middle-class children. As of September, 1970, there will also be Chinese children in the program.

We are currently serving 3948 children in Head Start and 5722 children in Follow Through. The Head Start children are predominantly three to five years old, and Follow Through children are in grades as follows: K-1 374; 1st grade 1704; 2nd grade 1301; 3rd grade 169; not known 1165. Forty percent of the Head Start programs last year (1969-70) were in rural areas, and 60 percent in urban areas, while Follow Through had 1700 children in rural programs and 4000 in urban programs.

Throughout the country, the Head Start program involved 39% black children, 27% white children, 28% Mexican-American children, 1% Oriental children, 2% Indian children, and 2% from all other ethnic groups.

The Responsive program is based on the assumption that parents must be involved if the program is to be successful. This means that a representative group of parents must approve of the program before it is introduced in a community, and parents have the right to review that decision after they have an opportunity to observe it in action.
It is designed to encourage parents to participate as paid assistants or volunteers, or attend meetings. The intention is to encourage parents to participate without requiring participation. In addition to approving programs, parents in some of the communities are currently involved in the decision-making process by helping to select both program advisers, teachers and teacher assistants.

In June, 1970, we started developing a training program for parents and parent coordinators to help parents improve their effectiveness in the decision-making process.

CURRICULUM/PROGRAM DESCRIPTION

The curriculum focuses on the process of helping children learn how to learn rather than on specific subject matter content. There is enough material written in careful detail to provide a comprehensive program for children ages 3, 4, and 5, and the materials are currently being extended for children through age 9.

These materials are organized in a parallel and sequential development using materials and equipment that are usually found in a classroom or are easily available locally. Some special materials have been developed which will be generally available by January, 1971. The arrangement at present is that the core materials for the program which have little or no cultural bias are provided by the Laboratory and any culturally relevant materials used are provided by the local program. The Laboratory is developing ethnic materials for use in the Responsive program and the first materials for Black children and Mexican-American children will be ready in September, 1970.
The typical program classroom situation in Head Start and Follow Through kindergartens is as follows:

As the children enter the room they are free to choose from a variety of activities such as painting, working puzzles, playing with manipulative toys, looking at books, listening to records or tapes, using the Language Master, and building with blocks. They can stay with an activity as long as they like or they can move on to something else whenever and as often as they like. As the day progresses, small groups will play games, which are learning episodes, with the teacher or assistants, and others will ask to be read to. During the day, the teacher and assistants are engaged in reading to the children, playing games with them and responding to the spontaneous activities to build the experience that precedes instruction in some skill or concept. The teacher and assistants respond to the children rather than having the children respond to them. Adult-initiated conversation is limited, but child-initiated conversation is encouraged.

About 15 or 20 minutes a day are devoted to large group activities such as singing, listening to a story, show and tell, or participating in a planned lesson. A child does not have to take part in group activities if he does not want to, but he cannot continue in any activity that disturbs the group.

Once each day in kindergarten and first grade classes with learning booths a booth attendant will ask a child if he would like to play with the typewriter. If the child says, "yes", the attendant takes him to a booth equipped with an electric typewriter. The child begins by simply playing with the typewriter and the attendant tells him what he
is doing. Whatever keys he strikes -- "X", "A", "Y", "comma", "space", or "return" -- the attendant names them. The child moves from this first free exploration phase through matching and discrimination to production of his own words and stories. At each phase we stress his discovery of the rules of the new phase (game).

In the first and second grade programs being developed, the same general procedures will be followed; but the activities will change and there will be more small group activities and perhaps two or more large group activities a day. The children will still have large blocks of time for individual activities. There probably will not be a block corner and dress-up area, but there will be more educational games and toys related to math and science. There may be small reading or arithmetic groups or reading and math may be taught on an individual basis. The first and second grade children should still be free to choose their own activities and to opt out of large or small group work.

The Head Start program is currently organized on a half day basis in groups of 15 to 20 children with one teacher and one assistant. The Follow Through program is a five or six hour program for groups of 25 children with one teacher and one assistant plus volunteers.

In addition to the Head Start and Follow Through programs, we are developing and testing a Parent/Child program designed to help parents to:

a. help their child develop a healthy self-image;
b. aid their child's intellectual development, using toys and games designed to teach specific skills, concepts, or problem-solving abilities; and
c. participate in the decision-making process that effects the education of their children.
The parents meet one time a week for ten weeks. Each time they learn some general principle of child growth and development, see a demonstration of how to use a toy or game with their children, practice its use, and then take it home. After ten weeks they can continue to use the Educational Toy Library as long as they like.

We believe that any program that is designed to serve children from low-income homes and different cultural and ethnic groups must be flexible. The program emphasizes flexibility in various ways:

a. in the procedures for responding to individual children;
b. in the range and difficulty levels of the materials used;
c. current materials have little or no cultural bias, but local groups can add culturally relevant materials, some of which will be developed by the Laboratory; and,
d. the parents can make choices; for example, they can choose to have English taught as a second language or have a bilingual program or use some other language.

DELIVERY

The Inservice Training program is designed around training local Program Advisers who train 10 teachers and 10 assistants. The Laboratory provides training materials for the teachers and assistants and training guides for the Program Advisers.

The training of Program Advisers begins in the summer with a two-week, in-depth orientation to the model and the Program Advisers return for three additional one-week workshop/seminars over the rest of the year.

The training for the teachers is organized into three twelve-week cycles to cover one year. Each cycle has eight training units designed to help a teacher improve specific skills and learn general concepts.
The Laboratory provides the following materials:

1. **Text:** Introduction to the New Nursery School and Pamphlets #1 to #6 by Nimnicht, McAfee and Meier, published by General Learning Corporation, 1969;

2. **Teachers' Notebook, Training Units, Program Advisers' Supplement, and Four Resource Packets;**

3. **Brochure, "The Responsive Head Start Program," script and black and white slide set;**

4. **Films, "Introduction to the New Nursery School," 27-minutes, color; and "Intellectual Development at the New Nursery School," 18 minutes, color (available free from Modern Talking Pictures, Washington, Chicago and San Francisco offices);**

5. **Films - 16 learning episodes demonstrated by a model teacher (about 5-minutes each);**

6. **Film - "Free Exploration in a Responsive Environment (in preparation); and,**

7. **Sound/Slide Sets Describing Selected Learning Episodes.**

The cost of operating the Head Start program is about the same as any other program with one teacher and assistant for 15 to 20 children. The initial cost of training includes the salary and expenses of the Program Adviser, about $25 per teacher for training materials, and the cost of six weeks of training for the Program Adviser each year for two years.
EVALUATION

The final evaluation of the program will be based upon how well it meets the objectives stated on pages 3 to 5. In the meantime, the various components of the program are being systematically evaluated. The Laboratory uses a systematic development process with four major steps: selection of approach and designing prototype; preliminary testing with a limited sample; performance testing with a larger sample but under careful supervision of the Laboratory; and, operational testing under normal field conditions with limited involvement of the Laboratory. At any point the process can be recycled if the desired results are not obtained.

The development and testing of the model program for children and the training program for teachers and assistants are parallel developments. The first concern in evaluating the program is to determine how effective the training program is in producing the desired changes in teacher behavior. The primary techniques that are being used are periodic classroom observations by trained observers and audio and video recordings of classroom behavior of teachers.

After the teacher's performance is satisfactory, the second concern is to determine the effects upon the children. Does the changed teacher behavior significantly affect the growth of children toward the objectives of the program?

We have collected baseline data for evaluation of the children by using standardized tests of intelligence and achievement, but we do not consider these tests as adequate measures of the program so we are developing a responsive achievement test to assess the children's achievement in intellectual development. The emphasis will obviously be on a child's
problem-solving ability. We are currently devising situational tests and observational techniques to assess a nine- or ten-year-old child's behavior on the thirteen indicators of a positive self-image stated on pages 3 and 4. In the meantime, we are relying upon observations to make some estimate of a child's self-concept at earlier ages.

The Laboratory does not anticipate having a final evaluation of the first phase of the total program for at least four or five years, but in the developmental process there are enough check points to ensure against a complete failure. One thing seems to be certain. If the program does not meet our expectations, the alternatives are to revise the program until it does or replace it with a better model--we cannot return to current practices.