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To the Graduate Council:

I am submitting herewith a dissertation written by Frank Jarman Sanders entitled "A Study of the Impact of the Chattanooga Public Schools Head Start Follow-Through Program 1967-70." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration and Supervision.

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A STUDY OF THE IMPACT OF THE CHATTANOOGA PUBLIC SCHOOLS' HEAD START FOLLOW-THROUGH PROGRAM 1967-70

A Dissertation

Presented to

The Graduate Council of

The University of Tennessee

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

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by

Frank Jarman Sanders

December 1970

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ABSTRACT

This study was to assess Chattanooga Public Schools Follow-Through Program 1967-70 to determine the program's impact as related to the objectives stated in the grant application. The purpose of this study was to determine the effectiveness of the Follow-Through Program on the academic achievement of selected pupils from 1967-70. It was a second purpose of this study to evaluate the impact of the Follow-Through Program in relation to nonacademic objectives. The study was restricted to one hundred pupils in the program and a control group of equal size randomly sampled from similar inner-city elementary schools. Four groups of children were included: (1) those pupils having three years of Follow-Through experience; (2) those pupils without Follow-Through experience; (3) those pupils having had Head Start experience and Follow-Through; and (4) those pupils having had no Head Start with Follow-Through experience.

For the purpose of this study, the Metropolitan Readiness Test (grade 1) and the California Achievement Test Battery (grades 2 and 3) were used to provide achievement measures on a pre- and posttest design.

There were some significant differences among subtest mean scores for pupils with Follow-Through experience and pupils without Follow-Through experience. For example, a significant value of *t* was found for Follow-Through and non-Follow-Through participants on mean scores of the Arithmetic Fundamentals subtest on the Spring testings of the California Achievement Test.

A significant difference was also found on Spring testing means for the Total Arithmetic subtest of the California Achievement Test. The t value was -2.28. The means scores on the Spelling subtest of the Spring testing produced a significant difference value of t as did the Total Language subtest means score and the Total Battery mean score. These values were -2.28, -2.83, and -2.28, respectively.

The Word Meaning section of the Metropolitan Readiness Test produced a significant difference value of t for the pupils with Follow-Through experience and pupils without Follow-Through experience. This t value was 3.02.

When an analysis was made of the achievement variables for pupils with and without Follow-Through experience holding Head Start experience constant, it was found that certain significant differences did occur. These data show that significantly different mean scores existed on the Spelling subtest of the California Achievement Test for the Spring testings and the Arithmetic Reasoning subtest for the Spring testing. No subtests of the Fall testing of the California Achievement Test produced significantly different mean scores. The Word Meaning subtest of the Metropolitan Readiness test produced a significantly different mean score. The t value was 2.14.

There were some significant differences in the achievement on selected subtests of the California Achievement Test and the Metropolitan Readiness Test for non-Head Start pupils with Follow-Through experience and those non-Head Start pupils without Follow-Through experience. These data show that significant differences existed in the mean scores

of non-Head Start pupils with and without Follow-Through experience on two subtests of the California Achievement Test. These subtests were Total Arithmetic and Spelling. These t-values were -2.13 and -2.10.

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CHAPTER I

INTRODUCTION

In an effort to build upon the successes of Project Head Start, 3,000 children in 30 school systems across the nation were selected to participate in an important development in American education. These children were selected in the fall of 1967 as the initial participants in the federally sponsored pilot program--Project Follow-Through.

Follow-Through, an extension into the regular public and private school systems of the concepts and practices of the Head Start Project, focuses on the same children as the preschool Head Start Program. Eligibility criteria for both programs facilitated the concentration of available resources on children seemingly hopelessly locked into the poverty cycle syndrome. Educators and governmental leaders agreed that in order to break the shackles of this cycle and to have an impact on the lives of those children so handicapped by an impoverished environment that a future of poverty is almost a statistical certainty, an extension of the gamut of educational opportunities afforded through Head Start was worthy of exploration. With the aid of $2.5 million in grants from the federal government through the United States Office of Education, the program was initiated in the Fall, 1967. The thirty pilot centers had developed plans for program implementation during the summer with the local school systems designing programs to reach an average of 100 children. Budget expenditures for each program were not to exceed $100,000.

Head Start was designed to help disadvantaged children enter school better prepared for that with which they were to be confronted than were their older brothers and sisters. Follow-Through was designed to continue that help and encouragement through the primary grades. As Head Start focused on children who had not yet entered formal schooling, Follow-Through began either at the kindergarten or the first grade level. The aim was to extend the program through the third grade, with the program focusing on grade one during the 1967-68 school year, being expanded to encompass the second grade in the 1968-69 school year, and extending through the third grade during the 1969-70 school year, meaning five years of special programs in communities with kindergarten and prekindergarten Head Start programs. This aim which was projected as a part of the original program was realized.

The developers of Follow-Through saw it not only as a continuation of Head Start, but as a reinforcement. Research has demonstrated that the gains which children make in Head Start classes often are lost in the transition to classroom work in regular schools, unless these schools also provide special attention.[1] It was projected that the experiences of these experimental centers--successes and failures--might ignite major challenges to some existing educational theories and compel educators and school systems' governing boards to reexamine basic concepts of early childhood education.

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[1]Jeannee S. Park, "Follow-Through to Head Start," The American School Board Journal, 155 (August, 1965), 5-6.

As in the case of Head Start and Title I projects, local communities developed their own centers to serve their particular needs. Local administrators were encouraged to explore a variety of approaches in fulfilling tasks. However, some "essential criteria" were defined. As part of these essential criteria, Follow-Through centers were expected to provide continuity with the work of the preschool program. They also had to provide comprehensive attention to all of the problems of disadvantaged children including health problems, lack of self-esteem, inability to use language, and other widely recognized deficiencies. In most cases this meant meeting basic nutritional needs as well as providing books. It meant the services of dentists, physicians, psychologists, and social workers. It also meant bringing parents into the program to promote in them an interest in what was being done for their children and to offer incentives for improving the home environment. The pilot programs received money for this wide-range of services and were equipped and staffed to diagnose and treat many problems interfering with a child's ability to learn.

Program components were planned so that the Follow-Through children were included in the regular school activities. The intent was to integrate them as much as possible with children of different economic, racial, and social backgrounds. Every activity was identified and developed with the purpose of extending the experiences of these children to encompass those experiences of more fortunate children.[2]

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[2] Ibid.

The pilot programs were funded in a select group of systems screened from a list of 100 school districts invited to submit project proposals. Criteria for grant awards required that the school district must have operated a year-round Head Start program. In addition, the district must:

A. Focus attention on the children who had participated in the Head Start Program and utilize their Head Start records to give continuity to the program;

B. Reflect the fullest possible economic, racial, and social integration;

C. Provide comprehensive mental, nutritional, and physical services--from diagnosis to rehabilitation;

D. Completely integrate psychological and social services with classroom activities;

E. Use every facility available so that the children can have an extended school day or even an extended year program;

F. Encourage parent participation.[3]

Chattanooga Public Schools met the criteria set forth and was awarded one of the initial Follow-Through grants.

I. THE PROBLEM

Background of the problem. Compensatory educational programs for preschool children have indicated that the syndrome of problems occurring

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[3]John F. Hughes, "How Project Follow-Through Will Help Schools," Nation's Schools, 80 (August, 1967), 34-35.

from the lack of developmental experiences of children existing in poverty and social alienation represent vastly more than the sum of their deprivation. Fresh milk, conversation, and positive environmental experiences initially administered at age five years lack the nutrient value they might have had at age five months. Thus, effective compensation becomes a long term process of determining needs, correcting defects, redirecting experiences, and facilitating enrichment before normal patterns of trust, responsiveness, and growth can be constructed.[4]

Based on the rationale that a long term process of rehabilitation was essential to enable disadvantaged children to move into the mainstream of the educational program, Chattanooga Public Schools submitted to the U. S. Office of Education an application for a pilot Head Start Follow-Through grant. The program, entitled "Proposal for a Pilot Project to Afford a Follow-Through First Grade Program for Former Head Start Enrollees," was one of thirty Follow-Through programs initially funded for the 1967-68 school year.

This study was to follow-up the Follow-Through Program of 1967-70 to determine the program's impact as related to the objectives previously stated in the grant application. As this was a three-year longitudinal study of a program conducted within the framework of Chattanooga Public Schools, a description of the school system is included.

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[4]Benjamin S. Bloom, Allison Davis, and Robert D. Hess, Compensatory Education for Cultural Deprivation (New York: Holt, Rinehart, and Winston, Inc., 1965), pp. 8-11.

Chattanooga Public Schools serves a city with a population of approximately 130,000 and is located in southeastern Tennessee, bordering North Georgia. The school system serves approximately 25,000 students in grades one through twelve. The racial composition of the school system is almost equally divided between Negro and Caucasian. Approximately 12,500 students are enrolled in the 12 junior high schools and 5 senior high schools and another 12,500 students are enrolled in 34 elementary schools. As the system serves a high concentration of inner-city pupils meeting economic and educational deprivation criteria for compensatory educational programs, emphasis has been placed on utilizing the full range of educational resources. In addition to state and local support, program support from resources made available through Title IV of the Civil Rights Act of 1964; Titles I, II, III, and VI of the Elementary and Secondary Education Act; Titles III and XI of the National Defense Education Act; Head Start and Head Start Follow-Through, Title II-A of the Economic Opportunity Act; Vocational Act of 1963; Neighborhood Youth Corps--Title I, Part B of the Economic Opportunity Act of 1964; Work-Study Programs--Vocational Education; Public Works Economic Development Act of 1965; Manpower Development and Training Act; Adult Basic Education Act of 1966; Federal Impact Act; School Lunch Act; Public Law 152; Public Law 91-248 School Lunch Program have been utilized. These programs have had a significant economic influence on the school system and the educational opportunities of the students and citizens of Chattanooga. Based on current programs, approximately $6 million of federal funds are being utilized by the school system representing approximately 25 percent of the total educational budget.

Based on the previously stated résumé of programs incorporated as a part of the school system, it is apparent that the system has made extensive efforts to effectively serve a diverse population. Educational change has become an integral part of the total operation. There is continuous planning and exploration related to program development, implementation, and refinement. As a result of this process, the school system's administrative staff identified a definite need for concentrated educational programs for educationally deprived children as an extension of the basic educational and philosophical concepts of Head Start into the primary grades. The federally sponsored Follow-Through program provided the means for servicing the extensive needs of these children. Chattanooga Public Schools was able to respond with a program designed to meet specifically identified needs of a specifically identified group of children. As one of the initial 100 applicants, the school system was awarded one of the thirty initial grants to become operational in September, 1967.

Statement of purpose. The purpose of this study was to determine the effectiveness of the Chattanooga Public Schools' Follow-Through Program on the academic achievement of selected pupils from 1967-70. It was a second purpose of this study to evaluate the impact of the Follow-Through Program in relation to its nonacademic objectives.

II. HYPOTHESIS

The following hypotheses were used to give direction to the analysis of the problem. Each was tested at the .05 level of confidence.

1. There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test of pupils with Follow-Through experiences and those without Follow-Through experiences.
2. There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test of Head Start pupils with Follow-Through experiences and those Head Start pupils without Follow-Through experiences.
3. There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test of non-Head Start pupils with Follow-Through experiences and those non-Head Start pupils without Follow-Through experiences.

III. JUSTIFICATION OF STUDY

Four major considerations gave direction to the planning of the Follow-Through program for students who attended the Head Start centers prior to their first grade enrollment:

A. Teachers of first grade classes lacked the opportunity to study, observe, and develop suitable curricula and techniques for use with first-year students, particularly those from deprived environments. Demonstration programs coupled with intensive inservice and on-the-job training were needed

to encourage a breakthrough in the traditional first grade orientation which had proven so inappropriate.

B. Isolation of children deprived of early contact with their more privileged peers served to compound their learning problems. There was a need to demonstrate school programs in which children suffering the effects of social, economic, and racial isolation were engaged in school activities with those children from families in a state of upward social mobility. The schools selected for inclusion in the Follow-Through program had biracial and mixed social composition student bodies which facilitated such program opportunities.

C. The multifaceted nature of poverty-rooted problems requires a multifaceted approach to their solution. Teacher training; rich compensatory curricula offerings; nutritional, medical, psychological, and social work services; and an intensive parent involvement program were proposed.

D. Eventual incorporation into the full regular school program of the components demonstrated as effective by the Follow-Through program was a primary aim of the project's implementation. Therefore, the training of personnel in the target area and from other schools into which the program could be expanded through utilization of Title I of the Elementary and Secondary Education Act and other resources was of paramount significance. Emphasis was given to the dissemination of project information both during and following the project term.

Before decisions can be made to invest large sums of money in the Follow-Through educational model, additional research is needed as to the lasting effects on children who have participated in such programs. Research of a longitudinal nature can offer some evidence of the effectiveness of the primary program.

IV. LIMITATIONS OF THE STUDY

These limitations were observed:

1. The study was restricted to one hundred pupils in the Follow-Through program grades one through three in Oak Grove, G. Russell Brown, and Hemlock Elementary Schools comprising the target group and a control group of equal size randomly sampled from similar inner-city elementary schools. Of this number, fifty of each group had had Head Start experience and fifty of each group had not been enrolled in Head Start.

2. Academic data were limited to that obtained from standardized tests of achievement and readiness.

3. This study did not attempt to distinguish between quality of instruction, nor the training and/or race of teachers and students. Rather, the study focused on the Follow-Through instructional model as compared with the traditional primary instructional program.

V. DEFINITION OF TERMS

Follow-Through. The Follow-Through Program was authorized under Title II of the Economic Opportunity Act with the basic purpose and framework for program development described in Public Law 90-222, Section 201(a):

> . . . to stimulate a better focusing of all available local, State, private, and Federal resources upon the goal of enabling low-income families, and low-income individuals of all ages, in rural and urban areas, to attain the skills, knowledge, and motivations and secure the opportunities needed for them to become fully self-sufficient. Its specific purposes are to promote, as methods of achieving a better focusing of resources on the goal of individual and family self-sufficiency . . .[5]

Section 222(a) of the Economic Opportunity Act, Public Law 90-222 authorized:

> A program to be known as "Follow-Through" focused primarily upon children in kindergarten or elementary school who were previously enrolled in Head Start or similar programs and designed to provide comprehensive services and parent participation activities . . . which the Director finds will aid in the continued development of children to their full potential . . .[6]

Within these authorizations the original program guidelines gave the following program description:

> The Follow-Through program has been established by the U. S. Office of Education and the Office of Economic Opportunity to sustain and supplement in the early grades the gains made by low-income children who have had a full year's experience in a Head Start or comparable pre-school program. The program is administered by the U. S. Office of Education under a delegation of authority from the Office of Economic Opportunity.
>
> Follow-Through is designed to meet the instruction, physical, and psycho-social needs of young children from low-income families in a program of comprehensive services and parent participation activities. The following components constitute comprehensive services in Follow-Through: instruction, nutrition, health, social work, and psychological services, and staff development.
>
> The Follow-Through Program recognizes that all elements in a child's environment influences him in the school, the family, the neighborhood, and the community. It is important that

---

[5]"Follow-Through Program Guidelines" (unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February 24, 1969), p. i.

[6]Ibid., p. 1.

these persons and agencies work together effectively to minimize adverse influences and maximize beneficial effects on the child's learning and development. Such comprehensive involvement may require changes in established ways of operating, organizing, or cooperating.[7]

Socially disadvantaged children. These children are at the bottom of the American society in terms of income and suffer from social and economic discrimination at the hands of the majority of society. They are widely distributed in the United States and while they are most visible in the big cities, they are present in all except the very high income communities. In racial and ethnic terms, these groups are about evenly divided between whites and nonwhites.[8]

Economically disadvantaged. The Office of Economic Opportunity guidelines, or index, for determining eligibility of children was used for Follow-Through. Table I shows, by household size and levels of gross income, those families considered to fall below the poverty line.

The total family income used in determining eligibility of low-income children in Follow-Through was based on the prior calendar year, or of the 12 months previous to school opening, whichever most accurately described the family's current economic status.

In order to be considered low-income, and therefore eligible for the full-range of comprehensive services, a child had to either (1) have met the above poverty criteria at the time of entrance to

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[7] Ibid.

[8] Robert J. Havighurst, "Who Are the Socially Disadvantaged?" Journal of Negro Education, 33 (Summer, 1964), 215.

TABLE I

POVERTY GUIDELINES FOR FISCAL YEAR 1969

Family Size	Nonfarm
1	$1,600
2	2,100
3	2,600
4	3,300
5	3,900
6	4,400
7	4,900
8	5,400
9	5,900
10	6,400
11	6,900
12	7,400
13	7,900

Head Start or a similar quality preschool program or (2) meet the above poverty criteria at the time of entrance to Follow-Through. Such a child remained eligible for services unless the family income rises $3,000 above the applicable poverty line--children from a family on welfare were considered eligible for services even though the family income may have exceeded the poverty line.[9]

VI. PROCEDURES

The population and its selection. One hundred pupils in grade one (1967) in Oak Grove, G. Russell Brown, and Hemlock Schools were chosen as the Follow-Through group. Fifty of these children had had Head Start experience. A sample of 100 pupils was selected at random from similar intercity schools using the traditional primary instructional program. Fifty of these pupils had had Head Start experience.

Instrumentation. For the purpose of this study, the Metropolitan Readiness Test (Grade 1) and the California Achievement Test Battery (Grades 2 and 3) were used to provide achievement measures on a pre- and posttest basis.

Metropolitan Readiness Tests were devised to measure the extent to which school beginners have developed in the several skills and abilities that contribute to readiness for first grade instruction.

Six tests are included in Metropolitan Readiness Tests as follows:

---

[9]"Follow-Through Program Guidelines," p. 33.

Test 1--Word Meaning, a 16-item picture vocabulary test. The pupil selects from three pictures the one that illustrates the word the examiner names.

Test 2--Listening, a 16-item test of ability to comprehend phrases and sentences instead of individual words. The pupil selects from three pictures the one which portrays a situation or event the examiner describes briefly.

Test 3--Matching, a 14-item test of visual perception involving the recognition of similarities. The pupil marks one of three pictures which matches a given picture.

Test 4--Alphabet, a 16-item test of ability to recognize lower-case letters of the alphabet. The pupil chooses a letter named among four alternatives.

Test 5--Numbers, a 26-item test of number knowledge.

Test 6--Copying, a 14-item test which measures a combination of visual perception and motor control.[10]

The California Achievement Tests were designed for the three-fold purpose of facilitating evaluation, educational measurement, and diagnosis and is composed of three tests: Reading, Arithmetic, and Language. These tests are further divided into two parts each; the Reading Test consists of reading vocabulary and reading comprehension; the Arithmetic Test consists of arithmetic reasoning and arithmetic fundamentals; and the Language Test consists of mechanics of English and Spelling.

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[10]Nellie L. Griffiths, Gertrude H. Hildreth, and Mary E. McGurran, Metropolitan Readiness Test--Manual of Directions (New York: Harcourt, Brace and World, Inc., 1966), p. 2.

Test 1--Reading Vocabulary, is composed of fifty items, each of which consists of a key word, the word to be selected, and three distracters. Areas of vocabulary items include mathematics, science, social science, and general.

Test 2--Reading Comprehension, is designed to reveal the pupil's comprehension of what he reads and to enable the teacher to make a diagnosis of specific difficulties which cause problems in reading. The test is divided into three sections which sample fifteen different functional elements including following directions, reference skills, and interpretation of material.

Test 3--The Arithmetic Reasoning Test consists of three sections: Meanings, Signs and Symbols, and Problems. The object of this test is to provide mathematic items which will quickly reveal the degree of functional ability.

Test 4--The Arithmetic Fundamentals Test is divided into sections on addition, subtraction, multiplication, and division, each sampling the different essential elements of its particular function.

Test 5--Mechanics of English Test consists of three sections: Capitalization, Punctuation, and Word Usage. These three sections sample twenty different essential elements of the mechanics of English.

Test 6--The Spelling Test consists of thirty selected sets of four words each with the pupil deciding which, if any of the four, is misspelled in each set.[11]

Techniques of analysis. The method of analysis chosen was a Student's t-test. This test is designed to determine significant differences between the means of sets of scores for the groups under study. An F-value was computed for significant differences in the variances of the two groups under study and is used to provide the proper correction in the value of t where necessary. This means that comparisons were made between pupils with Follow-Through experience and those without Follow-Through experience, between pupils having Head Start and Follow-Through or no Follow-Through experience, and pupils having no Head Start experience and Follow-Through experience or no Follow-Through experience.

The t-test provides for a comparison of means between sets of scores of an interval nature. The computing formula is:[11]

$$t_1 = \frac{(X_1 - X_2)}{s(1/n_1) + (1/n_2)} \quad \text{where} \quad s = \frac{SSX_1 + SSX_2}{n_1 + n_2 - 2}$$

$$t_2 = \frac{(\overline{X}_1 - \overline{X}_2)}{(s_1^2/n_1) + (s_2^2/n_2)}$$

$$DF_1 = n_1 + n_2 - 2$$

$$DF_2 = \frac{(s_1^2/n_1 + s_2^2/n_2)^2}{\frac{(s_1^2/n_1)}{n_1 - 1} + \frac{(s_2^2/n_2)^2}{n_2 - 1}}$$

$$F = s_1^2/s_2^2$$

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[11] R. L. Anderson and T. A. Bancroft, Statistical Theory and Research (New York: McGraw-Hill Book Company, Inc., 1952), pp. 81-83.

VII. ORGANIZATION OF STUDY

Chapter I presents the introduction to the study, the statement of the purpose, the hypothesis, the basic assumptions, the significance of the study, the limitations of the study, the definition of terms, the procedures, and the organization of the study.

Chapter II contains a review of the literature that is pertinent to the study. Chapter III provides a Follow-Through program description. Chapter IV is a presentation of data relative to the nonacademic Follow-Through program components. Chapter V presents an analysis of the academic Follow-Through program components. Chapter VI presents a summary of the study, the conclusion reached, and the recommendations.

CHAPTER II

RELATED LITERATURE

On February 8, 1967, President Lyndon B. Johnson delivered the following statement as a part of his message on children and youth:

> The achievements of Head Start must not be allowed to fade. For we have learned another truth which should have been self-evident that poverty's handicaps cannot be easily erased or ignored when the door of first grade opens to the Head Start child.
>
> Head Start occupies only part of a child's day and ends all too soon. He often returns home to conditions which breed despair. If these forces are not to engulf the child and wipe out the benefits of Head Start, more is required. Follow-Through is essential.
>
> To fulfill the rights of America's children to equal educational opportunity the benefits of Head Start must be carried through to the early grades.
>
> We must make special efforts to overcome the handicap of poverty by more individual attention, by creative courses, by more teachers trained in child development. This will not be easy. It will require careful planning and the full support of our communities, our schools, and our teachers.
>
> I am requesting appropriations to launch a "follow-through" program during the first school grades for children in areas of acute poverty. . . .
>
> Lyndon B. Johnson[1]

The above quotation reflected the concern of educators as well as the President regarding the unmet challenge of the underlying problems which had prompted the development of the Head Start Program.[2]

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[1]Louis J. McGuiness, "Operation Follow-Through," The Instructor, 76 (June/July, 1967), 61.

[2]Ibid.

Immediately following the President's commitment to a "follow-through" educational program, the U. S. Office of Education and the Office of Economic Opportunity invited a group of educators to serve as the Advisory Committee to federal agencies in the planning of Follow-Through. A Follow-Through Program was becoming a reality. The Advisory Committee formulated a broad program goal--"to enhance the child's capacity to cope effectively with life situations."[3] With emphasis on an experience based curriculum the broad objectives of the program involved meeting the physical, psycho-social, and instructional needs of children. In order to facilitate the realization of change and to place the child as the focal point of the educational process, the modification of attitudes and behavior of all adults working with these children and their families was also identified as an objective.

With these broad goals as a basis for program development, the Follow-Through National Advisory Committee established seven Task Forces concentrated on: Guidance and Psychological Services, State Responsibilities, The Instructional Program, Evaluation and Research, Social Services, Personnel and Staff Development, and Health Services.[4]

Based on the Advisory Committee's proposed guidelines, funds for Follow-Through were appropriated under the Economic Opportunity Act with the Office of Economic Opportunity delegating the responsibility for program administration to the U. S. Department of Health, Education, and

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[3]Gordon J. Klopf, "Follow-Through Program," Childhood Education, 44 (September, 1967), 72.

[4]Ibid.

Welfare. The specific unit of the Department of Health, Education, and Welfare charged with the responsibility for program implementation at the national level is the Division of Compensatory Education. Planning grants were awarded to 30 school districts in July, 1967. Pilot projects began in these districts in September, 1967; another 10 projects were funded in midyear.[5]

Follow-Through programs were designed to carry the benefits of Head Start into the regular school system. It offered graduates of full-year Head Start and similar preschool programs continued special attention not only in the field of instruction but in a wide range of other areas--medical, dental, nutritional, psychological, and social. It involved the parents and community in program activities and provided inservice training for professional and nonprofessional staff.[6]

According to project guidelines the criteria for a Follow-Through program included: continuity of developmental activities for graduates of full-year Head Start and other preschool programs, including transmission and maintenance of their records; fullest possible social, racial, and economic diversity with at least 50 percent of the children being graduates of Head Start or some other quality, preschool program; Comprehensive instructional, nutritional, health, psychological, and social services--all of which could be completely integrated with classroom activities; an instructional program that met the individual needs of

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[5]"Project Follow-Through" (unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February, 1968), p. 2.

[6]Ibid., p. 1.

the children; maximum use of school and neighborhood facilities--recreational, welfare, cultural, and social; meaningful parent participation in the school program; preservice and continuing staff development as an integral part of the regular work assignment for all staff members in the program; Policy Advisory Committee composed of representatives of the community action agency, neighborhood residents, parents, and other appropriate community leaders with at least 50 percent of such committees being neighborhood parents; and opportunities for the employment of low-income people from the neighborhood as paraprofessional assistants.[7]

The Advisory Committee stated that in order to have an effective follow through, children who had been in Head Start programs needed to enter the next level with a continuity of relationships, experiences, and services. This was a shared responsibility of both sending and receiving agencies, necessitating close working relationships in advance of transfer. Mutual understanding and cooperation was necessary among all agencies concerned with active parent involvement, health, nutrition, psychological services, social services, and instruction. Particular attention was encouraged for appropriate involvement of administrative and supervisory personnel in the process of development, maintenance, and transmission of essential information, data, and records.

The instructional programs for Follow-Through were designed so that children could develop an interest in learning, the desire to

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[7] Ibid., p. 4.

participate fully in learning activities, skills which enabled them to cope successfully with learning tasks, and knowledge which made it possible for them to understand their environment and to participate fully in the social and intellectual affairs of that environment. It was necessary that the instructional program be concerned with total personality development and that it be planned to provide for emotional, physical, cognitive, and social development.[8] The program recognized that all elements in a child's environment influence him--the school, the family, the neighborhood, and the community. Program components were designed to minimize adverse influences and maximize beneficial effects on the child's learning and development. It was anticipated that such criteria would necessitate changes in established ways of operating, organizing, or cooperating.[9]

Federally sponsored educational programs for the disadvantaged have resulted in educational change, however, there continue to be problems and concerns related to a long-range "follow-through" programs. Howard provides an overview of the role of "follow-through" programs and the subsequent responsibility of American education. He states that in order to remove the obstacles impeding progress toward beneficial programs of follow through, critical changes must be made in values and

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[8]"Preliminary Report of the Advisory Committee on Follow-Through" (unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, July, 1967), p. 15.

[9]"Follow-Through Program Guidelines" (unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February 24, 1969), p. 1.

procedures which have traditionally characterized American education. Howard outlines four factors which he identifies as being critical to quality program development. First, programs developed on a crash basis must be averted. Longer-range planning is now possible, and future purchases and expenditures must be made in keeping with reliable data and a knowledge of what educational procedures best assist disadvantaged children. Based on identified program objectives, expenditure of energy and resources can be directed toward the accomplishment of specifically stated goals that give direction to program implementation.

Second, public school personnel must become aware of the values, beliefs, and feelings of those who live in the world of poverty. The bias of public school administrators and teachers oriented to middle-class values and aspirations often hampers communication and association between the lower socioeconomic family and the middle-class oriented educator. Communications and cooperative partnerships must be established before the best interests of children can be served by either group. The school must provide leadership in making the initial move toward understanding and acceptance, as evidenced by the emphasis in the Follow-Through program on parental and community involvement and participation.

Third, a study of poverty must become the basis for planning new educational programs for impoverished children. Minor modification of existing programs is inadequate. New educational materials poured into traditional programs can spell disaster. More funds directed toward doing more of the same has proven to be a poor investment. The solution to simply expand or do more of the same which is so often advocated and

so often supported through compensatory educational programs has failed to have a positive impact on the struggle against poverty. It is time to plan programs for children and to examine what education is doing to children.

Fourth, school administrators must productively utilize the wisdom and experience of perceptive teachers in program planning. The thinking of children, parents, other laymen, and teachers must be utilized in designing comprehensive educational programs for children. No future program should be preconceived in some isolated front office where the realities of the classroom and the community are easily blurred; but developed by those most closely involved in program implementation and most closely associated with the children. Howard suggests that the success of a program to a large degree is determined prior to implementation. Commitments necessary for successful objective realization is a product of the planning process rather than an accidental product of after-the-fact token involvement.[10]

Cause for concern relative to the planning of compensatory educational programs is evidenced in the results of a research study conducted by Wolff which has implications for the Follow-Through program. Wolff compared the Head Start child and the classmate in kindergarten who had not had any preschooling and found that, although the Head Start child was initially more ready for education than his classmate and although this advantage seemed to persist for at least six months for

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[10]Eugene Howard, "Following Through with Federal Funds," Childhood Education, 44 (September, 1967), 20-21.

many of the children, in actual learning achievement there was no difference between the two groups of children. Six to eight months after the summer Head Start experience, there was no significant difference between the scores of Head Start children and the non-Head Start children as measured by the Preschool Inventory. The study probed into why this was so. Some basic attitudes and procedures on the part of the teachers were found which could not but defeat even their own best efforts, forecasting the progressive decline in the achievement of poverty- and minority-group children. The longer these children stay in school, the wider becomes the gap between their achievement and that of the other children.[11]

Wolff further concluded that two-thirds of the teachers' time is devoted to the top half of the class, which forecasts the academic future of the children ranked on the bottom half. The children realize that the teacher is not interested in them. It is much easier to work with those more capable students after too often teachers conclude that the slower student has some inherent problem which prohibits an acceptable rate of learning. The child responds by seeking other channels of development if they are to preserve their identify. Here, too, the experience of the preschool program can show the way to improvement. Small classes that permit more individual attention, coupled with the free and uninstitutionalized use of parents and community people in the daily life of the classroom, will insure against neglect of any child.[12]

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[11]Max Wolff, "Is the Bridge Completed?" Childhood Education, 44 (September, 1967), 13.

[12]Ibid., p. 15.

Based on the necessity to develop a program for children who required a wide-range of services advocated by Wolff, Howard, and many others, the thirty pilot centers involving 3,000 children and three million dollars in planning and operational grants were initiated in the fall of 1967. Programs were developed in keeping with the findings of many Head Start research studies such as the work previously described. An overview of the programs illustrates the various approaches. For example, one of the thirty Follow-Through programs designed for 108 six-year-olds focused on enriched activities in social studies, science, art, and music with the aim of infusing general reading and comprehension skills. Classes were restricted to 15 to 18 children and staffed by a professional teacher and two aides. Children received medical and dental care, breakfast and lunch at school, and social services. Teachers were retrained in the use of modern instructional techniques and equipment.

A New England center placed emphasis on nutritional and health services including preventive, diagnostic, and referral services--and close coordination between city, state, and private agencies. Another program featured extended day activities, providing family experiences to expand the children's and parents' aspirations through the development of cooperatively developed meaningful interaction. The instructional program focused on language deficiencies, especially the vague thought patterns brought on by the children's widespread use of localized dialect.

One project involved an extensive field trip program for 175 first-grade Sioux children living on an isolated reservation, while a

project located in the South featured an innovative classroom setting of "learning centers" rather than rows of desks, and a generous supply of new materials invitingly displayed around the classroom.

And so on--with each pilot project proposal outlining the goals it would hope to achieve for how many children.[13] As a part of each proposal each program submitted contained an evaluation design; however, program developers seemed to realize that in order to have an impact on the total life of the child of poverty time was important. Therefore, evaluation designs were often based on a longitudinal study with initial reactions to programs being based on subjective data.

After eight months of a Follow-Through Program designed for 100 children featuring readiness skills, one pilot project's subjective evaluation found that teachers and parents were convinced that children were progressing more rapidly than would have been the case in a regular classroom. However, no objective data was available.[14]

A lack of objective data reported in research studies regarding the Follow-Through program is illustrative of the need for an indepth examination of programs at the pilot centers. Each program has its unique characteristics and the possibility of isolating program variables suggests the desirability of wide dissemination of program results. The total nation-wide program evaluation is being conducted by Stanford Research Institute, prime contractor for the national evaluation.

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[13]Nolan Estes, "Follow-Through," American Education, 3 (September, 1967), 13-14.

[14]Harry Salsinger, "Following Up on Follow-Through," American Education, 4 (May, 1968), 12-15.

Evaluators collected baseline information on children in 1,600 classrooms in 105 Follow-Through projects during September and October, 1970. While some children were in higher grades, most students included were entering Follow-Through for the first time during the 1970-1971 school year. Stanford Research Institute will measure over the next few years the academic achievement of children participating in Follow-Through as they benefit from the intensive instruction and personal attention provided by the program in the early primary grades. However, the philosophy of the Follow-Through program recognizes that a child's development is influenced by all elements of his environment--family, school, neighborhood, and community--and that school is but a part of this life space. In this broader context, program evaluators will be looking at teacher, parent, and community roles in Follow-Through as well as changes in these relationships that can improve the total system on behalf of the child's educational development and growth as an individual. The Stanford Research Institute data will not be available in the near future.

CHAPTER III

FOLLOW-THROUGH PROGRAM DESCRIPTION

Based on the rationale that a long-term process of rehabilitation was essential to enable disadvantaged children to move into the mainstream of the education program, Chattanooga Public Schools submitted to the United States Office of Education an application for a pilot Head Start Follow-Through grant. The program, entitled "Proposal for a Pilot Project to Afford a Follow-Through First Grade Program for Former Head Start Enrollees," was one of the thirty Follow-Through programs initially funded for the 1967-68 school year.

Four major considerations gave direction to the planning of the Follow-Through Program for students who attended the Head Start centers prior to their first grade enrollment:

1. First grade teachers identified the need to study, observe, and develop relevant educational programs and related instructional techniques for use with first grade children, particularly those children from deprived environments. Demonstration training programs combined with extensive inservice and on-the-job training were necessary to facilitate change in the traditional first grade programs which has proven so meaningless for the disadvantaged child.
2. Separation of children deprived of early and daily contact with their more privileged peers served to increase their

problems. Local educators, and interested citizens identified the need to implement school programs in which children bearing the effects of social, economic, and racial separation participated in school activities with those children from families in a state of upward social mobility. The schools selected to participate in the Follow-Through Program had student bodies of biracial and mixed social composition which facilitated realization of such a goal.

3. The multiplicity of poverty-rooted problems required a multiplicity of approaches to their solution. Teacher training, enriched compensatory curricular offerings, nutritional, medical, psychological, and social work services and an intensive parent involvement program were proposed.
4. Future incorporation into the full regular school program of the Follow-Through program components demonstrated as effective was a primary aim of the project. Therefore, the training of personnel in the target area and from other schools into which the program could be expanded through the utilization of other resources was of significant consideration. Emphasis was focused on the dissemination of project information, both during and following the project term.

The following were the objectives of the Follow-Through program as delineated in the original application.

1. To detect and correct physical defects of young children; and to develop in students and their parents appropriate health practices.

2. To raise aspiration levels of both students and parents by providing activities which encourage self-expression, require self-discipline, and, in general, result in restructuring values and attitudes.
3. To aid families in becoming contributing members of the community by providing broader social contacts, counseling in child development, vocational guidance, and social services.
4. To assist each child in developing his full academic potential by creating the environment conducive to successful learning experiences.

I. STUDENT COMPOSITION OF THE PROGRAM

Four Follow-Through classes in three selected schools were organized to serve 25 to 28 students per class. A total of 100 children participated in the program during the 1967-68 school year. An average of 10 to 15 children who had had Head Start experience were assigned to each class. Each class was filled to the prescribed enrollment of 25 with non-Head Start experienced children for an average of 10 to 15 per class.

Students were selected to include approximately fifty Head Start children and fifty non-Head Start children. Racial balance and, insofar as possible, socioeconomic balance were maintained.

II. EDUCATIONAL NEEDS

In recognition of the multiplicity of forces which impinge upon a child and affect his total growth, development, and learning, it seemed appropriate to analyze not only the educational needs of the student, but to give equal concern to the needs of his teachers, his parents, and his community in planning a demonstration first grade and subsequently a unified primary program. It was in these terms that early experiences in Head Start preschool services to disadvantaged students were assessed and on these findings that the Follow-Through Program was based.

Student needs. The need for language development among disadvantaged children was viewed as crucial. The most handicapping defect was the actual lack of words, phrases, and organized patterns for the expression and reception of thought. It was this need which warranted the development of educational programs in early school years making available opportunities for children to verbalize their experiences and to organize word meanings in varied experiential contexts.

Among children deprived of stable home influences, poor organization of thought patterns and behavioral reactions as well as inadequate acquisition of language was identified as a serious impediment to learning. Closely related to the language deficits was the need for broadened experiences on which language meanings could be based and in which context the symbols of language, numerical concepts, and the necessary environmental understandings could be taught.

The lack of satisfactory experiences in infancy and early childhood of many disadvantaged students seemed to have blocked the development of the physical senses to their full potential for awareness and perception. Conspicuously lacking among students from disadvantaged homes was the concept of self-responsibility, which was viewed as prerequisite to success in an organized school program. Linked to the experiential lacks and irresponsibility, the absence of social skills even in their rudimentary forms was marked among Head Start children observed in their first school-related experiences. Even among very young children the inadequately developed or damaged ego-strength of disadvantaged children often negated their positive acceptance of school programs.

The instructional staff who worked closely with deprived children in preschool programs described the need to initiate virtually all learning with the most elementary concrete activities and to follow-up with many closely associated materials and action-related experiences, often to the point of over-learning prior to presenting basic abstractions. Also, attention to the physical needs of deprived children for food, clothing, rest, medical, dental, and visual care was viewed as prerequisite to facilitating positive school learning.

Teacher needs. The most successful teachers of deprived children in preschool programs were those who were able to accept a revised teaching role. Traditional teachers in their first experiences in programs for disadvantaged children needed much assistance in the transition from a closely structured subject or grade oriented program to one in which the teacher functions as a member of a learning team rather than in

single responsibility for a closed educational unit. Planning and organizing learning experiences at prebook and pencil level, responding with appropriate warmth, empathy, and stability to children, providing flexibility for the creative guidance of children through their first school experiences, and developing new approaches and techniques for compensatory education posed serious challenges for the traditional classroom teacher.

Parent needs. Toward the adjustment of the negative home environment by which disadvantaged children are affected in their educational progress, a need was seen for parent programs aimed at the development of positive attitude toward the school, the child, the self, and the community. Disadvantaged parents needed assistance in developing social skills, particularly those related to positive participation in school and community activities. They often lacked knowledge of community resources available to them and the understanding of their uses. Many parents needed training and tactful assistance in family management and child care. Job training and job upgrading programs were needed to assist in the provision of appropriate home environments for children. Parent education in health and nutrition were particularly needed in low income areas. Parents schooled to dependency needed opportunities and guidance for the exercise of self-responsiblity.

Instructional approaches. The institution of a Follow-Through Program resulted from the need to extend into the first grade classes the successful practices of the preschool program, to afford continuity

in curricular offerings, and to base early school planning and program development on the educational needs identified in the Head Start Program. The project's organization as a pilot effort was designed to focus concentrated attention to the provision of demonstration units in the school system and region, from which future plans for realistic first grade programs could be developed and in which teachers could be effectively trained in the utilization of new techniques, the use of new materials, and the design of new organizational patterns.

In order to establish continuity between the existing preschool program and that of the first school year, first grade teachers visited, observed, and shared in the activities of the summer (1967) Head Start centers which their prospective students attended. Head Start pupil data and anecdotal records were studied by the Follow-Through staff during the summer workshop. Follow-Through personnel met during the summer with parents of the Head Start children. The parent coordinator for the summer Head Start program worked in the Follow-Through program from September through December (1967) and, when possible, aides from the Head Start Centers were used in project first grade classes. Those preschool techniques and types of activities which proved effective in Head Start were incorporated into the curriculum. Classroom environments for first grades were planned and organized to provide similar settings to those with which students had become familiar in the Head Start centers.

Additional provisions for continuity included visitation and observation in Follow-Through classes by second grade teachers who would receive the students in the 1968-69 school year. In the latter months

of the project term, Follow-Through students were engaged in visitation and shared activity programs with second grade classes and teachers. Pupil data and anecdotal records from the classes were interpreted to second grade teachers near the conclusion of the initial project term.

Provisions for children from lower socioeconomic classes to share in school activities with children whose economic status had facilitated more and varied experiences were specified in the structure of the program. Approximately one-half of the students in each of the four first grade classes had been in Head Start classes, with the remaining one-half composed of students whose family incomes were either above the poverty line of Head Start eligibility criteria or who were economically eligible but had not attended Head Start. The racial distribution for each class was relatively proportionate to the racial distribution of first year students for the participating school. Each class was served by a teacher leader, teacher, classroom instructional aide, and volunteer parent aides. Classes shared the services of the project social worker.

In order to demonstrate the significance of a well-planned classroom environment, Follow-Through classrooms were arranged to create a comfortable home-like atmosphere. Floors were carpeted as part of the project demonstration to minimize sound and to permit on-the-job floor play activities appropriate for young children. Traditional rows of desks were excluded from the furnishings. Play and game centers, housekeeping nooks, picture and storybook centers, arts and crafts tables and easels, experience charts and work centers, language listening stations, display tables, sand tables, centers for growing plants and caring for

pets, and shelves for storage and display of materials were arranged. Mats for rest periods were made available. With the purpose of involving teachers and parents in designing suitable furnishings for first grade classrooms, project funds were used to purchase materials and contract the building of specially designed multipurpose furniture to be demonstrated in the classrooms.

Directed toward the identified educational needs for extensive language developmental activities, organization of thought patterns, and broadened experience, the curriculum for the Follow-Through classes was developed around an experience approach to learning. During the Head Start observations, in parent conferences and home visits, in team planning sessions with social workers, through the study of student records, and during the observation period at the opening of school, teacher leaders and teachers noted specific experiential lack of their students. Numerous activities which provided the missing experiences in varied contexts were planned. The word and language meanings to be identified for each set of activities, and teachers, aides, and parent volunteers were cued to stress their appropriate and repeated use. Techniques were developed for drawing from each child increasing verbalization of his experiences. Free play, role playing puppetry, dramatization, doll games, stimulated television and radio stations, tape recordings, conversations, display and sharing sessions, and related opportunities for verbalization were stressed.

Extensive development of experience charts, story and picture books dictated and designed by children, pupil-developed sentence story

strips for chart rack activities, object labeling, and word games preceded and later accompanied with formal first grade reading materials facilitated communication skills. Listening, viewing, examining, manipulating, and action activities, coupled with social verbalization, word labeling, sequence relating, and oral dramatization comprised major portions of the school day. Environmental exploration extended from the classroom to the rest of the school, the playground, the neighborhood, and the broader community. Flexible scheduling permitted outdoor activities, nature walks, and neighborhood exploration during the day as the need arose in connection with program developments and pupil needs for a change of setting. Such exploratory walks and field trips were planned for the entire class or arranged for small groups in order to increase opportunities for individual children to engage in verbal exchange with adults and with their peers. Graphic and tactile reproductions of their experiences were student made and accompanied with student-composed sentence descriptions and labels. Individual interests were capitalized on, and students were encouraged to pursue their explorations independently in pairs, or small groups, sharing their special projects with their peers and members of the adult team. Materials and displays were frequently arranged in order to provide a constant flow of stimulating learning experiences into the classroom. The use of mobile displays and work tables were explored for this purpose. Also, children were encouraged to bring into the classroom their own objects of interest which they wanted to share.

Use of the tape recorder in developing language self-improvement programs were emphasized. Films and tapes were also used in the teacher

self-improvement aspects of the program, as well as for evaluation and dissemination of project information.

As pupils grew in confidence and responsiveness, they shared in planning the organization of their physical environment. Toward the development of the concept of responsibility, the care and arrangement of materials, pets, plants, and displays were increasingly shifted to students. Some materials, such as picture books, pencils, art materials, and simple play things were given to children from time to time to take home as their own possessions in order to develop the sense of ownership. In the parent programs, parents were encouraged and guided to provide appropriate places for children to keep their own articles and to assist them in caring for them properly. At regular intervals classroom and extra-classroom activities were filmed and/or taped for use with students in the promotion of a self-improvement attitude and toward the building of strong self-image.

Development of social skills and appropriate social relationships was a major point of emphasis in curriculum planning and implementation. Members of the staff concentrated early efforts on the establishment of comfortable child-adult relationships on an individual basis. From this rapport, plans were directed toward drawing shy or hostile children into child-partner relationships by which larger group tolerance could be built in the ongoing program. It was anticipated that parent volunteers sharing in classroom activities could contribute much to this purpose as children in groups of two and three were led to pursue independent projects of special interest.

In the environmental exploration approach to social studies and science, the development of perceptual acuity was emphasized. By the extension of classroom activities into the school yard, neighborhood, and community, children had opportunities to explore and respond with all their senses. Planned guidance and reinforcement from the adults on the teaching team greatly facilitated expanding children's educational experiences into the total community.

The cultural arts specialists, the central supervisory staff, and the health and nutrition coordinator shared with the Follow-Through team in planning activities in which children might develop sensitivity to sounds, rhymes, rhythms, shapes, colors, textures, tastes, and smells. In these areas, also, emphasis was given to the verbalization of the sequence of events, to categorizing, to drawing relationships, to planning and follow through of simple activity steps with a gradual increase in this complexity, and to the organizations of materials and ideas.

The nutrition program was designed to serve both the physical and social learning needs of the children. Breakfast service for each project class was an integral part of the curriculum. Teachers, aides, and parent volunteers shared with lunchroom personnel in arranging family style breakfasts at which time "table-talk" had equal significance to that of the obvious nutritional purposes. Lunch, with provisions of free lunch for those in need of assistance, was similarly served and used for social, language, and perceptual learning. While family style service was continued through most of the school year, a buffet style of service was introduced to afford experience directed toward the standard

school cafeteria practices. As they grew in behavioral maturity, the children were involved in some preparations such as setting the table, serving certain types of food, and occasionally cooking a special dessert or other dish. Emphasis was placed on learning to eat a variety of nourishing foods and on the social, language, and perceptual learning described. The nutritionist for the central food service and the cafeteria personnel for the school were responsible for the dietary planning and preparations of breakfast, lunch, and afternoon snack included in the project.

IV. INSERVICE TRAINING

Crucial to the success of a pilot program such as that described were the training and on-the-job development of personnel, not only for the implementation of the project during its pilot term, but also for its eventual incorporation into the total ongoing program. Toward these ends, major emphasis in the project was placed on the summer inservice and teacher preparation aspect of the program and on the provision of on-the-job supportive assistance for purposes of continuous training.

Follow-Through teachers, supervisors, and the social worker engaged in visitation, workshops, and/or institute training at such centers as the University of Maryland and Bank Street College during the summer of 1967. Major attention during this period of training was focused on early child development, problems of the disadvantaged, and the processes of language development.

For two weeks during the summer, the first grade teachers who were to receive children previously enrolled in Head Start observed in the preschool center which their prospective students were attending and shared in the daily activities then in progress. They attended parent meetings with the preschool teacher and, whenever feasible, visited in the homes of students.

A two-week workshop for Follow-Through teachers and staff was conducted by members of the supervisory staff of Chattanooga Public Schools. The workshop program included a study of community agency services, examination of individual student records, curriculum planning, program preparations, and evaluation and organization of materials. Classroom aides participated in a ten-day workshop. Consultative services included representatives from the institutions previously visited, the University of Tennessee, and similar institutions of higher learning, the psychologist who was contracted for the project, and resource persons from the Office of Economic Opportunity.

In order to assure ongoing planning and continuous training of project staff members, teaching teams worked and planned together, consultative services were scheduled during the school year, half-day monthly meetings for evaluation and planning were arranged, travel expenses and substitute teachers were provided to release teachers for observation and conference sessions at the State Pilot Kindergarten Program in Murfreesboro, Tennessee, and Darcee Research Project in Nashville, Tennessee, and resource persons from the office of Economic Opportunity shared in teacher training.

The teaching teams previously mentioned consisted of four teacher leaders experienced in early childhood education. These teacher leaders had a broad understanding of the preschool and first grade curriculum and had participated in varying degrees in the Head Start Program. The teacher leaders provided leadership in the centers, sharing in classroom responsibilities with teachers. Four paid classroom aides were subprofessional team members. Parent volunteers rotated in the classroom aide program.

Both in connection with the curricular provisions for students' self-responsibility, self-image, and language development and for the ongoing self-evaluation and technique improvement of teachers, tapes and films were used regularly to record classroom activities. For this phase of the program, teachers were asked to train the classroom aide to film and/or tape representative classroom activities at frequent intervals. These films and tapes were used to assist students in self-evaluation and improvement. In after-school and monthly training sessions, the team of teachers analyzed the filmed and taped activities in relation to the instructional techniques applied, and planned improvements on the basis of their self-observations. As they gained confidence and felt the need for assistance in analyzing their own work, the confidential services of supervisory personnel were made available to them. Members of the supervisory staff of the school system provided regular consultative services to the teams, sharing in planning and program development, and gave direction for inservice training.

V. ANCILLARY COMPONENTS

Health. Each child from the Head Start group had a physical and dental examination during the term of the Head Start Program. In order to provide Follow-Through teachers a complete record of the physical needs of children in their classes, the children who had not participated in Head Start were given a physical examination. Those from this group who were unable to afford the service were referred for assistance from Title I of the Elementary and Secondary Education Act. All paid and volunteer personnel engaged in the program received blood tests and tuberculin tests through the services of the Hamilton County Health Department.

Corrective follow-up on minimum basic health needs of students, such as visual and dental needs, were provided through the extension of Head Start supportive services. For the correction of problems beyond basic needs (for example, orthodontic services, neurological examination, and attention to special health problems for which no other funds were available), it was proposed that Follow-Through resources be allocated.

In order to provide health education training for teachers, parents, and children, and to assure continuous attention to health needs, a registered nurse was assigned as a member of the Follow-Through team to coordinate the health services.

Social work services. One social worker and a social worker aide were assigned to the Follow-Through staff. During the early months of the project the social worker was engaged in the training program,

shared with teachers in the development of understandings of disadvantaged children and their families, visited the homes, collected needed data, collaborated with the nurse in the health services program, shared in development of the parent progress, and worked in close liaison with the Head Start social workers and Parent Coordinator. In the ongoing program social welfare services were provided to children and parents, and interpretive services to the teaching teams.

Diagnostic and psychological services. Each child in the program received an individual psychometric evaluation either by the psychological examiner for the school system or by contracted services for which provisions were included in the budget. The contracted services of a psychologist were proposed to allow:

a. Consultative services to teachers and social workers during the training period and school year.

b. Observation in the Follow-Through classrooms and related conferences with teachers.

c. Psychological examination of difficult cases referred after teachers and social workers observed classroom behavior, studied data, and screened the students to identify severe learning problems. It was proposed that the screening team would make initial referrals of those children with severe problems who had already been identified in the Head Start program. Following a period of observation and work with the children, a midterm screening was held to identify those who had not been in the Head Start Program and any students whose problems may have been overlooked in initial screening.

d. Interpretations of test findings and psychological evaluations were to be provided by the contracted psychologist.

VI. PARENT INVOLVEMENT

In an effort to maintain the parent involvement begun in the Head Start program and to expand it to increasingly meaningful dimensions, a series of events designed to facilitate parental participation in the total educational process of their children were proposed. The 1967 Head Start summer program provided for a five-month extension of services by the Parent Coordinator and social worker. In collaboration with the Follow-Through social worker, nurses, and teaching team, these staff members phased the Head Start services into the school program for parents of first grade students.

For each school unit represented an advisory committee was organized. These committees were largely composed of parents of the children who had participated in the Head Start program with the inclusion of some parents of the non-Head Start group in order to promote opportunities for the establishment of new social relationships among adults in the school communities. Representatives of the Community Action Program and the Neighborhood Service Centers served on the Follow-Through Advisory Committee. During the summer (1967), the Head Start Parent Advisory Council gave sponsorship and guidance to the organization of the Follow-Through Committees. The Parent Advisory Committee gave overall guidance to the parent programs and made recommendations to

the principal and professional staff concerning the needs of children and the ongoing development of the program.

Parent volunteers were asked to serve in the classroom, participating in activities in which they could provide a warm parental response for the reinforcement of children's learning while gaining insight into the needs of children. Parents had regularly scheduled opportunities to share in planning sessions with the staff.

Parents accompanied their children on field trips, sharing in both preplanning and follow-up activities. It was also a major purpose of the nutritional aspect of the program to involve parents in the breakfast, lunch, and health snack preparations, service, and "table talk" development. Also, in regular parent meetings particular attention was given to nutrition, sanitation, disease prevention, eye and ear care, safety and first aid.

Parent Centers for attendance centers were planned and developed to varying degrees. Parents assisted in furnishing, equipping, and decorating a meeting place with a home-like atmosphere where they could sew, cook, wash and iron, do craft work, visit, and sponsor child-centered activities. The close relationship which had been developed between the school personnel previously involved in Head Start and those engaged in the Community Action Program and the Neighborhood Service Centers resulted in continued collaboration in the Follow-Through program for parents. Cooperative outreach service to draw parents into existing adult education programs were planned and initiated. Surveys of

community needs for additional or improved services were a part of their collaboration, and bidirectional exchange of ideas and recommendations were sought.[1]

VII. PROJECT DEVELOPMENT--PROGRAM SPONSOR

Selection of program approach. According to the "Follow-Through Program Guidelines" each grantee must adhere to the following:

> Under the Follow-Through national program design of "planned variation," local projects are expected to enter into an arrangement with an approved "program sponsor" to implement a particular approach to the education and development of young, low-income children.
>
> Applicants should give particular thought and attention to the selection of a program approach that will best meet the needs and interests of the population to be served by the Follow-Through project. This process of selection must be undertaken in advance of preparation of the Follow-Through project application.
>
> The USOE Follow-Through Office will make information available to applicants on the various program approaches through the provision of written materials, meeting with program sponsors, and in other ways.
>
> The Policy Advisory Committee (or interim Advisory Committee) described in Section III, A, above must be established as the first step, so that it can participate in the selection of the program approach. The applicant should take steps to present and explain to as many parents as possible the range of available program approaches as well as the general goals of Follow-Through. All persons who will participate in the local Follow-Through project--parents, other community representatives, project staff--should consider this information and take part in the discussions leading to the selection of an approach. All

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[1]"Proposal for a Pilot Project to Afford a Follow-Through First Grade Program for Former Head Start Enrolles" (unpublished paper, Chattanooga Publis Schools, Division of Research and Development, Chattanooga, August 12, 1967), pp. 1-33.

involved should fully understand the nature of the commitment that is made in the selection--i.e., all will in good faith work toward and support the development of the selected approach.

Since no community can be guaranteed that its first choice of a program approach can be accommodated, each applicant should consider several approaches with which it would be willing to affiliate.[2]

Role of the program sponsor.

The program sponsor will provide necessary technical assistance and guidance to the project in all matters pertaining to the program approach selected and will assist in the development and implementation of those portions of the project which relate to the approach. A significant portion of the local Follow-Through project grant will need to be allocated to the implementation of the chosen program approach. The applicant and the program sponsor must consult before final preparation of the project budget, so that suitable financial arrangements will be provided for approach implementation. The USOE Follow-Through Office will arrange for such consultation.

During the operation of the project the program sponsor will provide to the local project such services as: training in the program approach for appropriate project staff during the summer and school year; assistance to the project in implementation, including the provision of consultant or supervisory services; arranging for appropriate instructional and other materials to be made available on a timely basis for purchase by the project; and evaluative activities.

The grantee in turn will be expected to cooperate fully with the program sponsor and take necessary steps to implement the approach promptly and thoroughly. The two parties should be prepared to enter into an agreement that sets forth mutual responsibilities and commitments.[3]

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[2]"Follow-Through Program Guidelines" (unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February 24, 1969), pp. 11-12.

[3]Ibid.

Rationale and major objectives of Chattanooga's program sponsor. Chattanooga Public Schools and the University of Florida entered into a cooperative arrangement whereby the Florida Parent Education Program would give additional direction and expanded emphasis on the program's parent component. According to the Director of the Institute for Development of Human Resources, Dr. Ira Gordon, a considerable body of research literature indicates that a major source of a student's pattern of achievement and motive for achievement, as well as his personality structure, is the home in which he grows up. The behavior and attitudes of his parents, as well as the nature of the physical setting and materials provided, have a direct impact on his behavior before and during the school years. In particular, three elements of the home may be categorized: demographic factors (housing, income, ethic membership), cognitive factors, and emotional factors. The cognitive variables might be further defined as the amount of academic guidance provided, the cognitive operational level and style of the parents, the cultural activities they provide, the amount of direct instruction they engage in, their educational aspirations, their language structure, and the frequency of language interaction, and the intellectuality they provide such as in books, magazines, and the like.

The parental emotional factors may be conceived of as the consistency of management and disciplinary patterns, the parents' own emotional security and self-esteem, their belief in internal versus external control of the environment, their own impulsivity, their attitudes toward school, their willingness to devote time to their children,

and their patterns of work. If these factors do contribute to child performance, then one phase of the educational program should be the education of parents to be aware of and use their talents to increase the achievement motivation, intellectual behavior, and self-esteem of the child. The Florida Parent Education Follow-Through Program, therefore, was designed to work directly in the home, so that the home situation might lead to better school and life performance. Most parents are good parents, interested and concerned about their children, with high hopes for them. All parents can continue to grow and learn ways to work with their children, which helps them in school and life. The Florida Program assumes that parents are adequate; it is designed to enhance this adequacy.

Not all of the child's behavior, obviously, is a function of the home. The school itself plays an integral role in the intellectual and personality development of the child. The nature of the curriculum, the mode of teacher behavior, the classroom ecology, all influence not only immediate behavior but also patterns of behavior for the future. Any program of compensatory education needs to work not only in the home but also in the school. The Florida Program, therefore, provides ways of changing the classroom organization, teaching patterns and influencing the curriculum in a Follow-Through classroom through (1) the use of paraprofessionals and, (2) the development, by the teaching team (teachers and paraprofessionals) of appropriate home learning activities growing out of the classroom program, and the parents' desires and needs.

The program emphasis is on (1) the development of nonprofessionals as parent educators and as effective participants in the classroom teaching process, (2) the development of appropriate instructional tasks which can be carried from the school into the home to establish a more effective home learning environment, and (3) development of parents as partners in the educational program for their children.

Major elements of the program are (1) the training of mothers (two to each classroom) in the role of combined parent educator and teacher auxiliary, (2) training the teacher in the use of paraprofessional personnel, (3) development of materials for family use which take into account not only the school's goals for the child, but also, and equally, the family's expectations, goals, life style and value system, and (4) involvement of the Policy Advisory Committee in all phases of the program.

Both teacher and parent educator are taught procedures for the development of teaching tasks. The parent education activity consists of periodic (preferably once a week) home visits in which the major activity is the demonstration and teaching of the mother in tasks that have been devised in school to increase the child's intellectual competence and personal and social development. A set of criteria are used by the teaching team in both the development and assessment of their materials. Responsibility for curriculum development rests in the local community. In each community, a library of activities has been developed which can be used by any Follow-Through teacher, regardless of grade level, when the activity matches the child and home. A

learning activity (task) may be used for many children, or may fit just a few. These tasks are developed to enhance not only the cognitive or academic development of the child, but also to strengthen the parent-child bond, to involve siblings, both older and younger, in the Follow-Through child's learning. They are not "homework," but game-type supplements. They are not designed as "remedial work" nor are they to be seen as serving "problem" children. They are for all children in the Follow-Through classroom. As a part of the demonstration in teaching, the parent educator helps the parent understand the purposes of each task, how to perform it, and how to estimate the ability of the child to complete the task. But tasks are not a one-way street. The parent educator not only encourages the parents to develop their own adaptation of the material, but also actively solicits from the parents their ideas about activities which have worked for them, their suggestions for future tasks, and their views about schooling. These, in turn, are used by the Follow-Through teachers and parent educators in the creation of new activities, with credit given to parent-originators. In this fashion the school is influenced by the home, and the parent is enhanced.

The parent educator also serves as the first line liaison person between the Follow-Through program and the home. The parent educator serves as a referral agent for medical, dental, psychological, or social services, by informing the mother of the existence of such services and, depending upon the community, establishing the contact between the home and a representative of these services. This requires that the parent educator understand the nature of other Follow-Through and community

services in addition to understanding the parent educator role in the task area. The parent educator informs the parents about PAC meetings and other school functions, and encourages involvement not only in task development, but in the whole range of community-school relationships.

In the school, the parent educator serves as a teacher auxiliary implementing instructional activities through working with individuals or small groups on various learning tasks. A basic element in the Florida Program is the recognition of the paraprofessional as a member of the teaching team. Under supervision, parent educators perform a wide range of activities in the classroom which are not confined to housekeeping, clerical or child care duties. Basic to the creation of sound home learning tasks is a knowledge of the child and his behavior in the classroom. By working with the children on school activities, the parent educator comes to know them; and thus, after planning with the teacher, can inform parents about the progress of the child.

The parent educator spends about half time in home visits, the load being half the families in the class. The remaining time is spent at school, working in the classroom, planning with the teacher, reporting to the teacher about the visits, and participating in inservice education. In several communities, organized staff development programs in local institutions of higher education offer the paraprofessional additional opportunities for personal career development.

A key person in the program is the classroom teacher. The classroom teacher supervises the classroom work of the parent educator and assists in planning and implementing the parent education activities.

The teacher, with the assistance of the parent educators, develops and selects the home learning tasks, briefs the parent educator before the visits, and receives the report after. In order to perform these duties, the teacher needs additional planning time, and many of the communities have built such time into their schedules. Further, the teacher receives effective technical help from a second or third adult in the classroom in carrying out the general goal of reaching each child. The teacher finds that there is increased parent understanding and support for the efforts extended, and also learns ways to work with other adults which increase the professional competence.

Parents are encouraged not only to visit the school and the classroom, but to take part in working with children in the room. Parents are not seen as observers or bystanders, but as people who can contribute to the education of all children. Thus, in a room the teacher may have several adults carrying out a variety of learning activities. The teacher, then, becomes better able to assess and meet individual needs because she is freed from the tyranny of large class instruction, and from the myth that children only learn when the teacher is teaching. She learns, through the creation of all home materials, ways to reorganize the classroom for individual and small group learning.

The community appoints a full-time coordinator who is responsible for all components of the Follow-Through Program. The coordinator attends the workshop at the University of Florida, and works closely with the program sponsor in implementing the Florida components.

Program sponsor support. In order for the teacher and parent educators to carry out this complex system of building firm relationships between home and school, developing effective home-learning materials, and involving the parents in teaching not only their own children but also influencing the learning of all children, the program sponsor provides preservice and inservice training.

The preservice training is conducted in two types of sessions. There is a workshop on the campus of the University of Florida in the summer for key personnel, including coordinators, parent advisory committee chairmen or representatives, principals, and a cadre of teachers and parent educators.

An on-site workshop of one week's duration is held in the local community. This workshop is staffed primarily by those who attended the campus workshop and who received orientation and skill training at that time. Their work is supplemented by a consultant from the University of Florida, who is present for two days during that workshop week. Representatives from all of the comprehensive services, as well as all the teachers and parent educators in the program attend this workshop. It is not assumed that the program is ready to be fully implemented at that point. The program sponsors see the program as developmental. The workshops are designed to enhance the skill of people who have been involved and to provide the entry skills for those for whom it is the first year.

The program sponsor provides two days of consultant service a month to the local community. Each community has a liaison officer who

is a faculty member of the College of Education of the University of Florida. He is in constant communication with the community, and arranges for the consultant's visit, briefs the consultant on the local situation, and then receives a report from him about his trip.

Beginning in September 1970, video will be used as a part of the inservice training procedure. Each community will send to the Institute for Development of Human Resources, the program sponsor, a half-hour video tape of a home visit, and a half-hour video tape of the classroom, the latter depicting either the planning session between teacher and parent educators, the reporting session after a home visit, or the tryout of home-learning tasks with individual or small groups of students, or some combination of these activities. The liaison officer and consultant view this tape and use it as part of the planning for the consultant's visit and for the workshop time of the consultant visit.

In addition to the video tape, each community sends copies of its home-learning tasks, the weekly observation reports of the parent educators, and attitude and questionnaire information about the home. These data are used by the liaison officer and consultants to assist in the inservice program and evaluation of the project. The parent educator weekly report provides some of the basic information about the effectiveness of the home-learning tasks. The questionnaire information (home environment review) provides the teachers and parent educators with some immediate insights about the nature of the home as a learning situation, and offers the program sponsor baseline data upon which suggestions can be made for both classroom and home activities. All of these materials

are explained to the Policy Advisory Committee, and no data are collected which have not been reviewed by that committee.

The program sponsor, the local education agency, and the parents are seen as a partnership team in which information flows back and forth, with the main objective of serving to enhance the total development of the child. Content decisions are completely the prerogative of the local community. The program sponsor attempts to enable teachers and parent educators to translate their content goals into effective learning materials to be used at home and in school to achieve what it is the parents and school wish to achieve.

The program sponsor, through continuous contact, strives to keep all elements of the program on target, and to facilitate the development of the program. The role of the Institute is more than consulting services; it provides direction, support, and information, as well as some elements of the evaluation program. Within the framework of the program, there is considerable flexibility to meet community needs.

The goal is to enhance child development through mobilizing the home, the classroom, comprehensive services, and University personnel. In the process, all are changed and all benefit.[4]

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[4]Ira J. Gordon, "The Florida Parent Education Program" (unpublished paper, University of Florida, Gainesville, Florida, August 27, 1970), pp. 1-8.

CHAPTER IV

ANALYSIS OF NONACADEMIC PROGRAM COMPONENTS

In order to determine to what degree nonacademic program components were meeting those objectives originally set forth, an evaluation team composed of two University of Tennessee graduate school professors and two doctoral students conducted an extensive on-site program review during the spring of 1970. The following analysis was initially prepared for the purpose of determining program effectiveness as perceived by those most closely associated with program implementation--teachers, parents, students, and project staff.

I. METHOD OF DATA COLLECTION

The method of data collection utilized for assembling that information essential for determining the degree to which Follow-Through was meeting its objectives was the structured interview. In the interviews, the interviewees were requested to respond verbally to a series of questions which were used as guides and catalytic agents rather than statements to be answered either "yes" or "no." The program director, a program assistant, two early childhood specialists, ten teachers, two parent educators, two teacher aides, five parents, and numerous students were interviewed. The interview instruments are included in Appendix A.

Instruments were developed consistent with the four stated objectives of the Follow-Through program.

A. To assist each child in developing his full academic potential by creating an environment conducive to successful learning experiences.

B. To aid families in becoming contributing members of the community by providing broader social contacts, counseling in child development, vocational guidance, and social services.

C. To raise aspiration levels of both students and parents by providing activities which encourage self-expression; require self-discipline; and, in general, result in restructuring values and attitudes.

D. To detect and correct physical defects in young children; and to develop in students and their parents appropriate health practices to build healthy bodies.

II. RESULTS OF EVALUATION TEAM'S STUDY

Objective A--To assist each child in developing his full academic potential by creating an environment conducive to successful learning experiences.

According to the evaluation team, Follow-Through was meeting the first objective in at least six different ways. The most impressive evidence was in the feedback from all persons interviewed concerning the latitude children were being given to freely express themselves. The opportunities were of several varieties. The children were encouraged to become actively involved in group projects being conducted in an atmosphere and setting conducive to free verbal expression. Children

were afforded opportunities to engage in numerous activities which allowed for the release of creative potential. The resulting classroom environment, though at times comparatively noisy, was designed to provide children every opportunity to learn at his own pace and in his own unique way. Even those interviewees who displayed some negative feelings about the program were willing to concede that this aspect of Follow-Through was successful.

A second part of the program which was almost universally recognized as successful was the area of social advantages. Most interviewees compared the social aspects of traditional classrooms with those of Follow-Through as the traditional classroom was a frame of reference for the experienced teachers. The interviewees expressed the position that the children benefit far more in the Follow-Through program where the concepts of teamwork, cooperation, and sharing are stressed. One instructor, who had been unable to suggest anything positive about the program stated that she had to admit that the disadvantaged children were happy, more open to suggestions, and generally more responsive than their counterparts in the traditional setting.

The evaluation team further concluded that the learning environment was undoubtedly enhanced by additional equipment and supplies. Each child had many opportunities to learn with the aid of tape recorders, language masters, listening systems, video tapes, and other pieces of electrical instructional equipment. The equipment appeared to be included in daily lessons of all varieties and was consistently being utilized in the instructional program.

The organization of the classroom into learning centers resulted in the facilitation of the development of an improved learning environment. The students, according to the staff, associated the centers with particular kinds of learning activities and were able to increase their productivity. At least one classroom in which the evaluators visited had the specific objectives for the lesson being taught in the individual center displayed on the center bulletin board.

According to the interviews, the Parent Educators in the Florida Model Program promoted the realization of a positive learning environment. Many of these staff members were observed as being actively involved in instructional activities. Through their presence, each child had increased opportunities for receiving support and reinforcement. The Parent Educators were markedly enthusiastic about their work both in the homes and in the classroom and what was happening with the children.

The learning environment was apparently conducive to learning in yet another way. Each child had many opportunities to make decisions of his own concerning alternatives in the instructional program. As a child progresses, he had chances to determine his rate of progress and in some instances the nature of the learning experiences in which he would engage. The opportunities to make decisions consistently enhanced his potential for increased problem-solving skills according to teacher observations.

Follow-Through had at least three weaknesses concerning the creation of a learning environment. The greatest of these was the negative atmosphere created when teachers were forced to teach in a program departing from the traditional. Feedback from some of these teachers

yielded information indicating that they often felt as though they had been unfairly treated and expected to participate in a type of instructional program for which they were ill-prepared and a program in which they had serious reservations relative to program philosophy. There appeared little evidence to support the idea that extended orientation might improve teacher attitudes, thus improving performance. Several of these teachers were approaching retirement age. Their alternative, in final analysis, was between teaching in the Follow-Through program or retiring early with a reduced pension. To expect teachers placed in this position to develop the commitment essential for successful program implementation was expecting too much. Follow-Through will not likely reach its full potential until these slots are filled with younger teachers who enter the program voluntarily and with basic educational philosophical concepts consistent with the concepts on which the Follow-Through program was developed. Realistic expectations for children's academic success was in some cases not evident and tolerance for noise and activity rather low. It was apparent that in at least two classrooms that the aides possessed more tolerance for Follow-Through children and their activities than did the teacher.

A second weakness in the program was the general belief among the teachers that Follow-Through children who had been in the program for three years did not experience as much academic success as they would have experienced in a traditional classroom. The evaluators supported the need for an indepth study to determine any difference in the children's achievement for this attitude among the teachers will exist until objective data is made available. Also, the presence of this concern

results in a lack of confidence in the program among the teachers. The evaluators expressed their concern for establishing the level of academic success in the Follow-Through program.

Another way in which learning environment was apparently weakened was by the slow movement of materials to the Follow-Through centers and the apparent lack of confidence some teachers had for the program office. One order for materials was months getting to the center. The materials arrived three weeks before the end of the school year. When asked why she did not call the central office to expedite the order, her reply was, "What good would that do?" The fact that materials were slow arriving was not as disturbing as the idea that at least three teachers had a poor image of the central office's effectiveness.

Objective B--To aid families in becoming contributing members of the community by providing broader social contacts, counseling in child development, vocational guidance, and social services.

At least five evidences of success in meeting Objective B were discovered. The trips planned for parents were highly successful as far as providing broader cultural horizons. Several parents expressed their belief that the experiences contributed greatly toward improving their knowledge of and appreciation for the community.

In a more focused sense, Follow-Through helped parents gain a positive feeling for the school. Most of the parents interviewed reported that before Follow-Through they either had negative feelings or no feelings at all relative to their child's school. All reported that the Follow-Through Program had altered their attitudes to a point where

they felt quite positive about school. Most of the remarks concerning Follow-Through had to do with the broad experiences that they believed were having an impact on their children's education.

The Follow-Through Program assisted disadvantaged families to discover social agencies in the community that were previously unknown to them. It did not appear important to the families that agencies to which they were directed were not a part of the Follow-Through Program. The important thing to the families was that they were now aware of a source of much needed assistance. Through this vehicle, Follow-Through had become a clearing house for families in need of aid or information.

Some families believed that Follow-Through had been of direct assistance to them or to others through vocational guidance. These jobs so acquired were in the Follow-Through Program itself. Follow-Through had not helped family members discover employment other than within Follow-Through. This in itself, however, was perceived as significant by some interviewees.

Family members (parents) reported a bonus from Follow-Through which was unsolicited by the investigators. The bonus was the discovery that several of the parents reported having developed positive feelings toward members of the other race as a result of Follow-Through activities. The feelings reportedly went beyond mere tolerance and extended into the realm of total acceptance. This discovery was made in a neighborhood served by a Florida Model school with an active staff of Parent Educators.

Several weaknesses were discovered by the investigators in the realm of community and social relations. One had to do with the trips arranged for parents. The trips were supposed to provide broader social contacts. To a certain extent they achieved this purpose. The trips brought members of a school community into contact with one another; however, the trips and other activities should probably bring parents into contact with a wide variety of people. Only as these contacts are made will real understanding of other segments of the community be possible.

A second possible weakness concerns the stated objective, "to provide counseling in child development." It was discovered that the only way the organization was even partially reaching this particular objective was through the activities of the Parent Educators in the Florida Model schools. Several parents reported that Parent Educators had offered assistance of this type. Extensive training was identified as a need if Parent Educators are to have adequate pertinent information to be effective in teaching parents about children's motor, psychological, social, and emotional growth.

There was insufficient information concerning Follow-Through's informing parents of children in the regular Follow-Through program. One parent was amazed to learn that his daughter had been to the dentist. Neither he nor his wife knew that such services were a part of the Follow-Through Program. The parents had visited the school, but a room in which parents might meet had not been available. As a result, the

meeting was held in a hallway. The mother had a very young child with her and decided that the baby was creating a disturbance, so she returned home without making additional efforts to get back to the school. No information was mailed to the parents to help them understand the extent or nature of Follow-Through.

In the Follow-Through Program there was only one social worker to extend the influence of the program into the children's homes. If information is to reach the parents, systematic mailing of carefully composed notices or brochures should be provided, according to the interview team.

The additional mail should not overshadow the need for additional personnel to make their ways into the homes of parents. The noticeable difference between interviews with regular program parents and Florida Model parents was the degree to which the Florida Model parents were informed of the benefits of the program and the closeness they reportedly felt with the program. The Parent Educators' visits to homes were obviously the key. Mail is a poor substitute for a Parent Educator, but mail is preferable to program ignorance.

Objective C--To raise aspiration levels of both students and parents by providing activities which encourage self-expression; require self-discipline; and, in general, result in restructuring values and attitudes.

Children in Follow-Through classes apparently have raised their aspiration levels in three areas: appreciation, creativity, and independence. The children displayed remarkable abilities to take advantage of opportunities in creative activities. One classroom which was visited

had displays of clay animal figures fashioned by the children. There was no idle effort to putter in clay. Real striving for excellency and even some talent were evident. The assignment had not been tightly structured, but some latitude had been offered in a choice of modeling subjects. Apparently the manner in which the assignment was made and the presence of the medium resulted in a high aspiration plateau.

The evidence of independent study also revealed heightened aspiration levels. The encouragement to explore alone and to depend somewhat on one's self apparently spurred at least some of the children in Follow-Through to break the barriers of tradition and progress more than might have been expected.

The teachers, as a whole, reported a belief that Follow-Through children had achieved greater respect for equipment and materials than they might have otherwise achieved. As time progressed through the school year, the abundance of equipment and supplies and their constant use in meaningful activities led to increased appreciation for these tools.

Higher aspirations were also reported by parents visited. Some Florida Model parents stated that the learning tasks sent home for use by the parents as they helped their children were of interest to them and that they were learning about the learning process and their children.

It should also be noted that several reports of closer family ties were heard. More than one mother suggested that the study periods with their children had led to increased knowledge of each other and to increased family unity. The parents were enthusiastic in responding

to questions pertaining to the learning tasks sent home. It was obvious that several of the parents took pride in aiding the learning process of their youngsters.

One Parent Educator reported the possibility that through contact with Follow-Through at least one parent had improved her appearnce. When the parent first visited the school, she was reportedly quite untidy. Upon subsequent visits and as interest in Follow-Through increased, she became a neater person even to the point of attempting to make her hair style more attractive.

Objective D--To detect and correct physical defects in young children; and to develop in students and their parents appropriate health practices to build healthy bodies.

The two aspects of health care which drew the greatest praise from Follow-Through participants were the excellent dental care received by the children and the increased effectiveness of children due to having breakfasts provided. Almost every parent interviewed marveled at the dental service offered his child. It was teachers, however, who provided feedback on the worth of the breakfast program. The teachers' reports indicated increased vitality and attentiveness as a result of the morning meal.

Other health measures provided for children which were brought to the attention of the investigators were the provision of psychiatric assistance, eye examinations, and eye glasses. One particular family was reported to have received assistance in all of these areas.[1]

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[1]John R. Ray and William Butefish, "Follow-Through Evaluation" (unpublished paper, Chattanooga Public Schools, Division of Educational Programs, Chattanooga, August, 1970), pp. 41-48.

CHAPTER V

ANALYSIS OF ACADEMIC FOLLOW-THROUGH PROGRAM COMPONENTS

Four Follow-Through classes in three selected schools (G. Russell Brown, Hemlock, and Oak Grove Elementary Schools) were organized to serve approximately twenty-five pupils per class. A total of one hundred children participated in the program. Students were selected to include fifty Head Start children and fifty non-Head Start children. Racial balance and, insofar as possible, socioeconomic balance was maintained.

Initial class composition was as follows:

A. 1. Fifty children previously enrolled in the four selected Head Start centers.

   2. Fifty non-Head Start children.

B. The racial and economic distribution of Head Start and non-Head Start children is shown in Table II.

The purpose of this chapter was to present data relative to the effectiveness of the Chattanooga Public Schools' Follow-Through Program on the academic achievement of selected pupils from 1967-70. Selected subtests of the California Achievement Test Battery and the Metropolitan Readiness Test served as input variables. These analyses are built around obtained grade placement when the California tests are used and on raw score analyses when the Metropolitan Readiness Tests are used. There are Fall testings and Spring testings (Grades 2 and 3) for the California Achievement Test series, but only Fall test scores (Grade 1) are available for the Metropolitan Readiness Test. It should be

TABLE II

RACIAL AND ECONOMIC DISTRIBUTION OF HEAD START AND NON-HEAD START CHILDREN

School	Black	White	Family Income		
			Under $3,000	$3,000-$5,000	$5,000
	Number of Head Start Children Served				
G. Russell Brown	7	6	7	4	2
Oak Grove (Class A)	7	6	9	2	2
Oak Grove (Class B)	5	4	6	2	1
Hemlock	6	9	10	3	2
	Number of Non-Head Start Children Served				
G. Russell Brown	5	6	6	2	3
Oak Grove (Class A)	5	7	6	4	2
Oak Grove (Class B)	7	9	8	6	2
Hemlock	4	7	6	3	2

recognized that various sample sizes are found throughout these analyses due to factors of pupil mobility, illness, and incomplete data sources.

The following analyses are built around the hypotheses from Chapter I and each hypothesis is restated for clarification. Significance was checked at the .05 level of confidence.

Hypothesis 1--There will be no significant differences in the achievement on selected subtests of the California Achievement Tests and the Metropolitan Readiness Tests of pupils with Follow-Through experience and those pupils without Follow-Through experience.

The analysis of this hypothesis indicates that there were some significant differences among subtest mean scores for pupils with Follow-Through experience and pupils without Follow-Through experience. For example, a significant value of t was found for Follow-Through and non-Follow-Through participants on mean scores of the Arithmetic Fundamentals subtest on the Spring testings of the California Achievement Test. The means, standard deviation, number of observations, and t-test values for this analysis and all others relative to Hypothesis 1 are found in Table III.

A significant difference was also found on Spring testings means for the Total Arithmetic subtest of the California Achievement Test. The t value is -2.28. The means scores on the Spelling subtest of the Spring testing produced a significant difference value of t as did the Total Language subtest means score and the Total Battery mean score. These values were -2.28, -2.83, and -2.28 respectively.

TABLE III

MEANS, STANDARD DEVIATION, NUMBER OF OBSERVATIONS, AND t-TEST VALUES FOR SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST AND THE METROPOLITAN READINESS TEST FOR PUPILS WITH FOLLOW-THROUGH EXPERIENCE AND PUPILS WITHOUT FOLLOW-THROUGH EXPERIENCE

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Read. Voc. CAT	FT - Fall	1.73	0.78	152	-0.23
	NFT - Fall	1.71	0.72	104	
	FT - Spring	2.02	0.91	89	-1.16
	NFT - Spring	1.83	0.55	32	
Read. Comp. CAT	FT - Fall	1.69	0.82	151	1.11
	NFT - Fall	1.79	0.81	159	
	FT - Spring	2.48	0.95	85	-0.53
	NFT - Spring	2.38	0.93	32	
Total Read. CAT	FT - Fall	1.73	0.76	151	0.61
	NFT - Fall	1.78	0.72	159	
	FT - Spring	2.06	1.01	87	-0.38
	NFT - Spring	1.99	0.63	32	
Arith. Reason. CAT	FT - Fall	2.03	0.98	151	0.40
	NFT - Fall	1.20	0.88	104	
	FT - Spring	2.38	0.95	91	-0.06
	NFT - Spring	2.37	0.98	32	
Arith. Fund. CAT	FT - Fall	2.04	0.99	150	-1.49
	NFT - Fall	1.88	0.90	164	
	FT - Spring	2.65	1.16	91	-2.02*
	NFT - Spring	2.19	0.96	32	
Total Arith. CAT	FT - Fall	2.05	0.93	150	-1.15
	NFT - Fall	1.93	0.85	164	
	FT - Spring	2.70	0.96	91	-2.28*
	NFT - Spring	2.24	0.95	32	
Mech. of English CAT	FT - Fall	1.84	0.86	149	0.05
	NFT - Fall	1.90	0.81	101	
	FT - Spring	2.33	0.97	90	-1.27
	NFT - Spring	2.10	0.73	31	
Spelling CAT	FT - Fall	1.58	0.69	148	-0.06
	NFT - Fall	1.58	0.56	150	
	FT - Spring	2.50	1.05	85	-2.83*
	NFT - Fall	1.90	0.59	27	

TABLE III (continued)

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Total Lang. CAT	FT - Fall	1.75	0.82	148	0.91
	NFT - Fall	1.84	0.73	150	
	FT - Spring	2.38	0.79	90	-2.28*
	NFT - Spring	2.02	0.64	31	
Total Battery	FT - Fall	1.89	0.82	147	0.38
	NFT - Fall	1.93	0.75	149	
	FT - Spring	2.46	0.88	89	-2.08*
	NFT - Spring	2.09	0.75	31	
Word Meaning MR	FT - Fall	5.57	2.03	42	3.02*
	NFT - Fall	7.15	2.51	33	
Listening MR	FT - Fall	8.95	2.56	42	0.80
	NFT - Fall	9.45	2.85	33	
Matching MR	FT - Fall	6.08	2.83	39	-0.60
	NFT - Fall	5.06	3.09	32	
Alphabet MR	FT - Fall	5.49	3.18	35	1.11
	NFT - Fall	6.52	4.14	27	
Numbers MR	FT - Fall	9.70	4.95	42	-0.12
	NFT - Fall	9.55	5.24	31	
Copying MR	FT - Fall	5.97	3.92	34	-.34
	NFT - Fall	5.63	3.76	27	
Total MR	FT - Fall	38.86	16.21	42	0.87
	NFT - Fall	42.26	17.02	31	

*Significant at .05 level.

FT = Follow-Through participants.
NFT = Non-Follow-Through participants.

The Word Meaning section of the Metropolitan Readiness Test produced a significantly different value of t for the pupils with Follow-Through experience and pupils without Follow-Through experience. This t value was 3.02.

Hypothesis 1 was accepted in twenty-one of the twenty-seven possible comparisons. In the area of Arithmetic Fundamentals—California Achievement Test the Follow-Through mean score was significantly higher than the non-Follow-Through mean score at the .05 level. The Follow-Through group also scored significantly higher in the areas of Total Arithmetic, Spelling, Total Language, and Total Battery. The non-Follow-Through group did initially score significantly higher on the Word Meaning Subtest of The Metropolitan Readiness Test. Therefore, in five of the six subtests in which significant difference was computed the Follow-Through group did have the higher mean score when compared with the non-Follow-Through group. The number of cases available for analysis ranged downward to twenty-seven which was considered a minimum N. In the twenty-one subtests in which there was no significant difference the mean scores were extremely close with the range of variation being from .00 to .83 on the California Achievement Test.

Hypothesis 2--There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test of Head Start pupils with Follow-Through experience and those Headstart pupils without Follow-Through experience.

When an analysis was made of the achievement variables for pupils with and without Follow-Through experience holding Head Start experience

constant, it was found that certain significant differences did occur. The data relative to this analysis are found in Table IV.

These data show that significantly different mean scores exist on the Spelling subtest of the California Achievement Test for the Spring testings, and the Arithmetic Reasoning subtest for the Spring testing. The t value is 2.80.

No subtests of the Fall testing of the California Achievement Test produced significantly different mean scores. The Word Meaning subtest of the Metropolitan Readiness test produced a significantly different set of mean scores. The t value was 2.14.

Hypothesis 2 was accepted in twenty-five of the twenty-seven possible comparisons. In the area of Spelling of the California Achievement Test the Follow-Through mean score was significantly higher than the non-Follow-Through mean score at the .05 level. The Follow-Through group scored significantly lower in the area of word meaning on the Metropolitan Readiness Test. Therefore, in only two of the twenty-seven comparisons significant differences were computed and each group scored higher than the other in one instance. As in the first comparison the variation in the mean scores was very low with the range being from .02 to .57 on the California Achievement Test.

Hypothesis 3--There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test of Non-Head Start pupils with Follow-Through experience and those Non-Head Start pupils without Follow-Through experience.

TABLE IV

MEANS, STANDARD DEVIATION, NUMBER OF OBSERVATIONS, AND t-TEST VALUES FOR SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST AND THE METROPOLITAN READINESS TEST FOR HEAD START PUPILS WITH AND WITHOUT FOLLOW-THROUGH EXPERIENCE

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Read. Voc. CAT	FT - Fall	1.66	0.71	89	-0.70
	NFT - Fall	1.58	0.61	74	
	FT - Spring	1.93	0.85	54	-1.01
	NFT - Spring	1.71	0.48	17	
Read. Comp. CAT	FT - Fall	1.62	0.75	88	0.79
	NFT - Fall	1.72	0.73	71	
	FT - Spring	2.28	0.87	51	-0.95
	NFT - Spring	2.05	0.76	17	
Total Read. CAT	FT - Fall	1.65	0.67	88	0.20
	NFT - Fall	1.67	0.62	71	
	FT - Spring	1.93	0.92	53	-0.27
	NFT - Spring	1.86	0.63	17	
Arith. Reason. CAT	FT - Fall	2.00	0.96	89	-1.40
	NFT - Fall	1.80	0.80	73	
	FT - Spring	2.21	0.85	56	0.12
	NFT - Spring	2.25	0.98	17	
Arith. Fund. CAT	FT - Fall	1.95	0.94	88	-1.29
	NFT - Fall	1.76	0.88	73	
	FT - Spring	2.45	1.10	56	-1.54
	NFT - Spring	1.98	1.07	17	
Total Arith. CAT	FT - Fall	1.99	0.87	88	-1.32
	NFT - Fall	1.81	0.80	73	
	FT - Spring	2.49	0.92	56	1.53
	NFT - Spring	2.09	1.02	17	
Mech. of English CAT	FT - Fall	1.74	0.81	87	-0.35
	NFT - Fall	1.70	0.68	71	
	FT - Spring	2.28	0.91	55	-0.95
	NFT - Spring	2.05	0.82	17	
Spelling CAT	FT - Fall	1.53	0.61	87	-0.48
	NFT - Fall	1.49	0.40	63	
	FT - Spring	2.37	1.05	51	-2.80*
	NFT - Spring	1.80	0.54	15	

TABLE IV (continued)

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Total Lang.	FT - Fall	1.66	0.77	87	0.13
CAT	NFT - Fall	1.67	0.60	63	
	FT - Spring	2.29	0.74	55	-1.65
	NFT - Spring	1.96	0.72	17	
Total Battery	FT - Fall	1.82	0.76	86	0.17
CAT	NFT - Fall	1.84	0.65	63	
	FT - Spring	2.31	0.81	54	-1.50
	NFT - Spring	1.98	0.79	17	
Word Meaning	FT - Fall	5.26	1.89	27	2.14*
MR	NFT - Fall	6.85	2.73	13	
Listening	FT - Fall	8.81	2.77	27	-0.13
MR	NFT - Fall	8.69	2.59	13	
Matching	FT - Fall	5.71	2.66	24	-1.76
MR	NFT - Fall	4.08	2.75	13	
Alphabet	FT - Fall	5.48	3.23	21	0.21
MR	NFT - Fall	5.78	4.47	9	
Numbers	FT - Fall	9.30	4.79	27	-0.12
MR	NFT - Fall	9.08	0.24	13	
Copying	FT - Fall	5.38	3.44	21	-0.59
MR	NFT - Fall	4.64	3.32	11	
Total MR	FT - Fall	36.26	15.74	27	0.09
	NFT - Fall	36.77	18.76	13	

*Significant at .05 level.

FT = Follow-Through participants.
NFT = Non-Follow-Through participants.

Data for the analysis of Hypothesis 3 are found in Table V. These data show that significant differences exist in the mean scores of Non-Head Start pupils with and without Follow-Through experience on two subtests of the California Achievement Test. These subtests are Total Arithmetic and Spelling. These t-values are -2.13 and -2.10.

Hypothesis 3 was accepted in twenty-five of the twenty-seven possible comparisons. In the area of Spelling and Total Arithmetic, California Achievement Test the Follow-Through group scored significantly higher than the non-Follow-Through group. However, it should be noted that the number of cases ranged from thirty-five to twelve in these two subtests with twelve being considered a minimum N. The range of variation of mean scores on the other subtests of the California Achievement Test was extremely small in that the high was .55 and a low of .00.

TABLE V

MEANS, STANDARD DEVIATION, NUMBER OF OBSERVATIONS, AND t-TEST VALUES FOR SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST AND THE METROPOLITAN READINESS TEST FOR NON-HEAD START PUPILS WITH AND WITHOUT FOLLOW-THROUGH EXPERIENCE

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Read. Voc. CAT	FT - Fall	1.84	8.76	63	-0.16
	NFT - Fall	1.82	7.90	90	
	FT - Spring	2.18	9.89	35	-0.79
	NFT - Spring	1.96	0.08	15	
Read. Comp. CAT	FT - Fall	1.78	0.91	63	0.49
	NFT - Fall	1.86	0.86	88	
	FT - Spring	2.79	0.99	34	-0.13
	NFT - Spring	2.75	1.00	15	
Total Read. CAT	FT - Fall	1.83	0.86	63	0.24
	NFT - Fall	1.86	0.79	88	
	FT - Spring	2.26	1.12	35	-0.45
	NFT - Spring	2.13	0.62	15	
Arith. Reason. CAT	FT - Fall	2.06	1.03	62	-0.40
	NFT - Fall	2.12	0.93	91	
	FT - Spring	2.64	1.04	35	-0.43
	NFT - Spring	2.50	0.99	15	
Arith. Fund. CAT	FT - Fall	2.16	1.05	62	-1.20
	NFT - Fall	1.97	0.92	91	
	FT - Spring	2.97	1.20	35	-1.63
	NFT - Spring	2.42	0.80	15	
Total Arith. CAT	FT - Fall	2.13	1.01	62	-0.67
	NFT - Fall	2.03	0.88	91	
	FT - Spring	3.04	0.95	35	-2.13*
	NFT - Spring	2.43	0.87	15	
Mech. of English CAT	FT - Fall	1.97	0.92	62	0.58
	NFT - Fall	2.05	0.87	90	
	FT - Spring	2.43	1.06	35	-0.89
	NFT - Spring	2.16	0.62	14	
Spelling CAT	FT - Fall	1.65	0.79	61	-0.10
	NFT - Fall	1.64	0.64	87	
	FT - Spring	2.69	1.02	34	-2.10*
	NFT - Spring	2.03	0.65	12	

TABLE V (continued)

Subtest	Group/Test Period	Mean	Std. Dev.	N	t
Total Lang. CAT	FT - Fall	1.90	0.88	61	0.44
	NFT - Fall	1.96	0.80	87	
	FT - Spring	2.51	0.85	35	-1.67
	NFT - Spring	2.09	0.56	14	
Total Battery CAT	FT - Fall	1.99	0.90	61	0.06
	NFT - Fall	1.99	0.81	86	
	FT - Spring	2.70	0.94	35	-1.67
	NFT - Spring	2.24	0.71	14	
Word Meaning MR	FT - Fall	6.13	2.20	15	1.53
	NFT - Fall	7.35	2.41	20	
Listening MR	FT - Fall	9.20	2.18	15	0.82
	NFT - Fall	9.95	2.98	20	
Matching MR	FT - Fall	6.67	3.09	15	0.07
	NFT - Fall	6.74	3.88	19	
Alphabet MR	FT - Fall	5.50	3.23	14	1.05
	NFT - Fall	6.89	4.04	18	
Numbers MR	FT - Fall	10.40	5.33	15	-0.30
	NFT - Fall	9.89	4.55	18	
Copying MR	FT - Fall	6.92	4.57	13	-0.38
	NFT - Fall	6.31	4.00	16	
Total MR	FT - Fall	43.53	16.51	15	0.49
	NFT - Fall	46.22	14.93	18	

*Significant at .05 level.

FT = Follow-Through participants.
NFT = Non-Follow-Through participants.

CHAPTER VI

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This study was conducted to determine the effectiveness of Chattanooga Public Schools' Follow-Through Program on the academic achievement of selected pupils from 1967-70 and to evaluate the input of the Follow-Through Program's nonacademic components in relation to stated objectives.

One hundred pupils from grade one (1967) in Oak Grove, G. Russell Brown, and Hemlock Elementary Schools were chosen as the target group (Follow-Through). Fifty of these children had had Head Start experience. A sample of 100 pupils was selected at random from similar intercity schools using the traditional primary instructional program. Fifty of these pupils also had had Head Start experience.

The instruments used in the study to provide objective data for analyses were the Metropolitan Readiness Test and the California Achievement Test. The Metropolitan Test was administered upon entry into grade one in the Fall of 1967. The California Achievement Test was administered on a pre- and posttest design for the 1968-69 and 1969-70 school years. Subtests of the California Achievement Test which were administered included: reading vocabulary, reading comprehension, arithmetic reasoning, arithmetic fundamentals, mechanics of English, and spelling. Total languages and total battery composite scores were also computed.

Analyses were made on the test results to determine (1) if there were any significant differences in the achievement on selected subtests of the California Achievement Test, or the Metropolitan Readiness Test of pupils with Follow-Through experiences and those without Follow-Through experiences; (2) if there were any significant differences in the achievement on selected subtests of the California Achievement Test, or the Metropolitan Readiness Test of Head Start pupils with Follow-Through experiences and those Head Start pupils without Follow-Through experiences; (3) if there were any significant differences in the achievement on selected subtests of the California Achievement Test, or the Metropolitan Readiness Test of non-Head Start pupils with Follow-Through experience and those non-Head Start pupils without Follow-Through experience.

II. FINDINGS

There were some significant differences among subtest mean scores for pupils with Follow-Through experience and pupils without Follow-Through experience. For example, a significant value of t was found for Follow-Through and non-Follow-Through participants on mean scores of the Arithmetic Fundamentals subtest on the Spring testings of the California Achievement Test.

A significant difference was also found on Spring testing means for the Total Arithmetic subtest of the California Achievement Test. The t value is -2.28. The means scores on the Spelling subtest of the Spring testing produced a significant difference value of t as did the

Total Language subtest means score and the Total Battery mean score. These values were -2.28, -2.83, and -2.28 respectively.

The Word Meaning section of the Metropolitan Readiness Test produced a significant difference value of t for the pupils with Follow-Through experience and pupils without Follow-Through experience. This t value was 3.02.

When an analysis was made of the achievement variables for pupils with and without Follow-Through experience holding Head Start experience constant, it was found that certain significant differences did occur.

These data show that significantly different mean scores exist on the Spelling subtest of the California Achievement Test for the Spring testings, the Arithmetic Reasoning subtest for the Spring testing. The t value was 2.80.

No subtests of the Fall testing of the California Achievement Test produced significantly mean scores. The Word Meaning subtest of the Metropolitan Readiness test produced a significantly different set of mean scores. The t value was 2.14.

There were some significant differences in the achievement of selected subtests of the California Achievement Test or the Metropolitan Readiness Test of non-Head Start pupils with Follow-Through experience and those non-Head Start pupils without Follow-Through experience.

These data show that significant differences exist in the mean scores of non-Head Start pupils with and without Follow-Through experience on two subtests of the California Achievement Test. These subtests are Total Arithmetic and Spelling. These t-values were -2.13 and -2.10.

III. CONCLUSIONS

The analysis of the nonacademic program components based on the degree to which the program was meeting those objectives originally set forth indicated that in relation to: Objective A--To assist each child in developing his full academic potential by creating an environment conducive to successful learning experiences.

Children involved in the Follow-Through program were afforded the opportunity to express themselves, became actively involved in their learning process, assisted in charting the course of their educational program, provided the necessary hardware to facilitate their learning experiences, and generally enjoyed an environment that was designed for the child rather than the child being expected to adjust to an extremely structured setting. It was further concluded that the Florida Model Parent Program was well received by the staff and community.

Follow-Through had at least three weaknesses concerning the creation of a positive learning environment. The greatest of these was the negative atmosphere created when teachers were forced to teach in a program departing from the traditional. There was a general belief among the teachers that Follow-Through children who had been in the program for three years did not experience as much academic success as they would have experienced in a traditional classroom. Another area of concern focused on a seeming breakdown of administrative mechanical procedures which hindered the delivery of materials and general program implementation.

Objective B--To aid families in becoming contributing members of the community by providing broader social contacts, counseling in child development, vocational guidance, and social services.

The evaluation concluded: trips planned for parents were highly successful as far as providing broader cultural horizons, helped parents gain a positive feeling for the school, assisted disadvantaged families to discover social agencies in the community that were previously unknown to those in need, and provided employment at the paraprofessional level for some Follow-Through parents, and several parents reported having developed positive feelings toward members of the opposite race as a result of Follow-Through activities.

Concerns expressed by the evaluators focused on the limited scope of the parent trips as related to the fact that very limited contact with other segments of the broader community was provided. Very little counseling in child development was evident. Communications with the community concerning program activities was a point of major concern.

Objective C--To raise aspiration levels of both students and parents by providing activities which encourage self-expression; require self-discipline; and in general, result in restructuring values and attitudes.

According to the evaluators, children in Follow-Through classes apparently raised their aspiration levels in three areas: creativity, independence, and appreciation. The teachers reported a belief that Follow-Through children had achieved greater respect for equipment and materials than they might have otherwise achieved.

Higher aspirations were also reported by parents. Some of the parents participating in the Florida Parent Model Program stated that the learning tasks sent home for use by the parents as they assisted and gave direction to their children were also of interest to them and that they were learning about the educational process of their children

Objective D--To detect and correct physical defects in young children; and to develop in students and their parents appropriate health practices to build healthy bodies.

The two aspects of health care which drew the greatest praise from Follow-Through participants were the excellent dental care received by the children and the increased effectiveness of children due to the breakfast program.

In the academic program the following hypotheses were tested in the study:

H_o1: There will be no significant differences in the achievement on selected subtests of the California Achievement Test, or the Metropolitan Readiness Test of pupils with Follow-Through experiences and those without Follow-Through experiences.

Hypothesis 1 was accepted in twenty-one of the twenty-seven possible comparisons. In the area of Arithmetic Fundamentals, California Achievement Test, the Follow-Through mean score was significantly higher than the non-Follow-Through mean score. The Follow-Through group also scored significantly higher in the areas of Total Arithmetic, Spelling, Total Language, and Total Battery. The non-Follow-Through group did initially score significantly higher on the Word Meaning subtest of the

Metropolitan Readiness Test. Therefore, in five of the six subtests in which significant differences were computed the Follow-Through group did have the higher mean score when compared with the non-Follow-Through group.

H_o2: There will be no significant differences in the achievement on selected subtests of the California Achievement Test, or the Metropolitan Readiness Test of Head Start pupils with Follow-Through experiences and those Head Start pupils without Follow-Through experiences.

Hypothesis 2 was accepted in twenty-five of the twenty-seven possible comparisons. In the area of spelling of the California Achievement Test the Follow-Through group's mean score was significantly higher than the non-Follow-Through mean score. The Follow-Through group scored significantly lower in the area of word meaning on the Metropolitan Readiness Test. Therefore, in only two of the twenty-seven comparisons significant differences were computed and each group scored higher than the other group in one instance.

H_o3: There will be no significant differences in the achievement on selected subtests of the California Achievement Test or the Metropolitan Readiness Test on non-Head Start pupils with Follow-Through experiences and those non-Head Start pupils without Follow-Through experiences.

Hypothesis 3 was accepted in twenty-five of the twenty-seven possible comparisons. In the area of Spelling and Total Arithmetic, California Achievement Test, the Follow-Through group scored significantly higher than the non-Follow-Through group. No significant differences were found in the Metropolitan Readiness Test scores.

IV. RECOMMENDATIONS

The results of this study provide the foundation for several recommendations:

1. The local educational agency should identify and implement personnel procedures and policies whereby those involved in specially funded projects can participate voluntarily.
2. A procedure to involve personnel who will be charged with the responsibility for program implementation in the planning process is essential for staff commitment to program understanding and subsequent success.
3. Those aspects of the program such as health, Florida Parent Model, materials and equipment, and instructional environmental setting that have been implemented successfully and received positively by the educational and lay communities should be considered for dissemination throughout the primary educational program.
4. A continuous follow-up study of the children included in the sample used in this study should be conducted to determine long-range impact of the program.
5. Steps should be taken to improve communications within the program and between the program and community.
6. A curriculum study committee composed of parents, teachers, and project staff should be considered.

BIBLIOGRAPHY

BIBLIOGRAPHY

Anderson, R. L., and Bancroft, T. A. Statistical Theory and Research. New York: McGraw-Hill Book Company, Inc., 1952.

Bloom, Benjamin S., Allison Davis, and Robert D. Hess. Compensatory Education for Cultural Deprivation. New York: Holt, Rinehart, and Winston, Inc., 1965.

Estes, Nolan. "Follow-Through," American Education, 3 (September, 1967), 13-14.

"Follow-Through Program Guidelines." Unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February 24, 1969.

Gordon, Ira J. "The Florida Parent Education Program." Unpublished paper, University of Florida, Gainesville, 1970.

Griffiths, Nellie L., Gertrude H. Hildreth, and Mary E. McGurran. Metropolitan Readiness Test—Manual of Directions. New York: Harcourt, Brace, and World, Inc., 1966.

Havighurst, Robert J. "Who are the Socially Disadvantaged?" Journal of Negro Education, 33 (Summer, 1964), 215.

Howard, Eugene. "Follow-Through with Federal Funds," Childhood Education, 44 (September, 1967), 20-21.

Hughes, John F. "How Project Follow-Through Will Help Schools," Nation's Schools, 80 (August, 1967), 34-35.

Klopf, Gordon J. "Follow-Through Program," Childhood Education, 44 (September, 1967), 72.

McGuiness, Louis J. "Operation Follow-Through," The Instructor, 76 (June/July, 1967), 61.

Park, Jeanee J. "Follow-Through to Head Start," The American School Board Journal, 155 (August, 1965), 5-6.

"Preliminary Report of the Advisory Committee on Follow-Through." Unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February, 1968.

"Project Follow-Through." Unpublished paper, U. S. Office of Education, Bureau of Elementary and Secondary Education, Division of Compensatory Education, Washington, February, 1968.

"Proposal for a Pilot Project to Afford a Follow-Through First Grade Program for Former Head Start Enrollees." Unpublished paper, Chattanooga Public Schools, Division of Research and Development, Chattanooga, August, 1967.

Ray, John R., and William Butefish. "Follow-Through Evaluation." Unpublished paper, Chattanooga Public Schools, Chattanooga, August, 1970.

Salsinger, Harry. "Following Up on Follow-Through," American Education, 4 (May, 1968), 12-15.

Wolff, Max. "Is the Bridge Completed?" Childhood Education, 44 (September, 1967), 20-21.

APPENDIX

SUPERVISORS

1. How has the program aided families to become contributing members of the community? Is there a list of families so aided?

2. How have families been provided broader social contacts?

3. How did families receive counseling in child development? Who was responsible for the counseling?

4. How did families receive vocational guidance? Who was responsible for the guidance?

5. What social services did the families receive?

6. What activities were provided which encouraged self expression of parents?

7. What activities have been provided for children which were designed to alter their values or attitudes?

8. What activities have been provided for parents which were designed to encourage self expression on their part?

9. What activities have been provided which have altered the values and attitudes of parents?

10. What measures have been taken to detect children's health defects?

11. What corrective measures have been taken to combat detected health problems?

12. What measures have been taken to develop appropriate health practices in the parents?

13. What evidence exists that training and preparation of personnel in the target area and from other schools has occurred in the Follow-Through Program?

14. What evidence exists that information gleaned from this project has been disseminated?

15. What evidence exists which reveals that Follow-Through is superior to the regular school program for Head Start children?

TEACHERS

1. This program was designed specifically for deprived children. How does the learning environment here differ from that of a regular school classroom?

2. How has the program aided families to become contributing members of the community? Name one family which has been so aided.

3. One of the aims of the program was to provide broader social contacts for families. How have you, personally, helped this goal be achieved?

4. What activities have you provided which encouraged self-expression of students?

5. What activities have you provided which allow the children to develop self-discipline?

6. Have you detected a change in values or attitudes in the children since they started with you?

7. What measures have you observed which were intended to detect possible defects in the children's health?

8. What corrective measures have you observed which were intended to improve health conditions?

PARENTS

1. What things have you done which have taken you into parts of Chattanooga you wouldn't have otherwise visited?

2. What people have you come in contact with whom you wouldn't have come in contact with outside Follow-Through?

3. Have you ever received help in understanding how your child grows and develops?

4. Have you ever received vocational guidance?

5. What other kinds of help have you received from Follow-Through?

6. How has Follow-Through been of benefit to you as a parent?

7. How has Follow-Through been of benefit to your youngster?

8. How could Follow-Through be improved?

VITA

Frank Jarman Sanders was born on July 28, 1942, in Murfreesboro, Tennessee. He attended the public schools in Rutherford County and Alcoa, Tennessee, and graduated from Alcoa High School in 1960. He graduated from The University of Tennessee in Knoxville in 1964 with a Bachelor of Science degree in English Education.

He taught school in Chattanooga, Tennessee, for two years and served as administrative assistant principal at the junior high school level for one year prior to becoming a supervisor in the Division of Research and Development in 1967. In 1970 he assumed the responsibility of directing federal programs for the Chattanooga Public Schools. He attended the University of Tennessee and received a Master of Science degree in Educational Administration and Supervision in 1966. In 1967, he entered a doctoral program at The University of Tennessee and graduated in December, 1970, with a major in Educational Administration and Supervision.