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**ABSTRACT**

A nongraded educational program of several learning levels and highly individualized instruction, financed by the district and by Elementary Secondary Education Act Title I funds, the Directed Learning Program is in its third year of operation in the Hempstead, New York school system. The program is the district-wide method of instruction for what were formerly elementary grades one through five and, in some instances, one through six. The district devised the program when it became apparent--as evidenced by test scores--that the existing system was not providing Hempstead children with the best of all possible education. The Directed Learning Program is an exemplary project because the children have made tremendous academic progress and acquired very positive attitudes toward themselves, their ability, and their school experiences. Teachers are also very enthusiastic about the program. The Directed Learning Program could be replicated by other school systems where a traditional approach had been ineffective. Hempstead plans to extend the program to include the middle school (grades six to eight) and eventually the high school. (Author/JM)

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**DIRECTED LEARNING PROGRAM**

**(Hempstead, New York)**

**US DEPARTMENT OF HEALTH  
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## Preface

In efforts at improving the quality of education and at justifying expenditures for compensatory education and school desegregation, we are increasingly dependent upon the data of evaluative research. Yet the data from many of these evaluation efforts conducted over the past twelve years are confused and inconclusive. The findings from these studies are sometimes contradictory. The interpretations have become the subject of considerable controversy, particularly as these findings and interpretations appear to contradict some of our cherished assumptions concerning education and educability. The lack of clarity with respect to the meaning of these data and the value of such programs is in part attributable to a variety of problems in the design and conduct of evaluative research. Among these problems, increasing attention is being called to the fact that there are sparse data concerning the specific nature of program interventions. These tend to be reported under labels or brief descriptions which provide little information relative to the nature and quality of the treatments to which the pupils studied are exposed. In an effort of gaining a better understanding of the content and nature of some of these programs, this project was directed at describing selected programs thought to be exemplary of quality, progress, trends or problems in compensatory education and school desegregation. Ten compensatory education programs and two school desegregation programs were selected for detailed description.

The principal procedures utilized in this study included documentary

analysis, direct observation of programs and interviews with selected informants. The tasks to be accomplished included identification and selection of projects to be studied, collection of all available data on each project considered, field study of promising candidate projects, preparation of descriptive reports, final selection and reporting.

Following is the description of one of these selected programs.

For the complete report of this project see document number ED 099 458

in the ERIC system.

To improve the learning experience of its students, the Hempstead New York school system has developed the Directed Learning Program.

Designed to

develop competence in reading and arithmetic, and to improve motivation, self image, and aspirational level by reducing the experience of failure and enhancing the experience of success

Through

a new kind of intra-school organization  
a curriculum designed to foster individual instruction and learning, and  
a non-graded learning situation,

The Directed Learning Program has resulted in:

significant academic success as measured by standardized achievement tests  
extremely positive attitudes among students toward themselves, their ability, and their schools

**Examination of the standardized test data indicates that learning under the Developmental Learning Program has been a highly successful experience.**

**In the Spring testing, after one year of the Developmental Learning Program, the first grade (which had not been tested in the pre-test) scored three months in reading skills (word knowledge, word analysis, and reading) and approximately five months in mathematics above the national norm group.**

**Of the 700 students sampled in the study, almost 80 percent said that they enjoyed coming to school every day; less than 10 percent said they did not enjoy coming to school.**

These are only a few of the significant findings reported in this exemplary project. For Hempstead administrators, teachers and parents, the reports were especially gratifying: in 1968-1969, the year before the Directed Learning Program was instituted, a higher percentage of Hempstead first graders scored in the low range in reading readiness on the Pupils Evaluation Program than the average for Nassau County. The situation worsened as the children progressed -- Hempstead had a higher percentage of third graders in the low range than the average for Nassau County. Although the validity of test scores can be questioned, the value of the ability to read is indisputable. Hempstead turned to the Directed Learning Program to improve the educational experience that it provided for its children.

#### SUMMARY

A non-graded educational program of several learning levels and highly individualized instruction, the Directed Learning Program is in its third year of operation in the Hempstead, New York school system. Financed by the district and by ESEA-Title 1 funds, the Directed Learning Program is the district-wide method of instruction for what were formerly elementary grades 1-5, and, in some instances, 1-6. The district devised the program when it became apparent -- as evidenced by test scores -- that the existing system was not providing Hempstead children with the best of all possible education. The Directed Learning Program is an exemplary



project because the children have made tremendous academic progress and acquired very positive attitudes toward themselves, their ability and their school experiences. Teachers are also very enthusiastic about the program. The Directed Learning Program could be replicated by other school systems where a traditional approach had been ineffective. Pleased with the results attained during the past two and a half years, Hempstead plans to extend the Directed Learning Program to include the middle school (grades 6-8) and eventually the high school. And now to the Directed Learning Program -- a successful non-traditional approach to the major goal of education, an effective learning experience.

#### WHERE

Forty thousand people now inhabit Hempstead, New York, originally a small, middle-income suburb of New York City. Over the past 15 years, many city dwellers -- in their quest for better housing and schools -- have gravitated to Hempstead, drawn by its relative proximity to New York City and to mass transportation facilities. The influx included many families with lower incomes and of different racial and ethnic backgrounds. Three of the six village census tracts are now designated as "poverty tracts", and 30 percent of the children qualify for Aid to Dependent Children. The district's eligibility for Title I funds is also indicative of the large number of low-income families. Approximately one-third of Hempstead's population is black, with a small number of Spanish-speaking residents, mainly from Ecuador and Puerto Rico.

## WHO

### THE STUDENTS

Although black families comprise only one-third of the Hempstead community, approximately 76 percent of the public school pupils are black; approximately 20 percent are white; and 4 percent, Spanish-speaking. This paradoxical situation exists because the school district boundaries are not contiguous with the township boundaries. Thus many of the white children who live in Hempstead attend schools in other districts; still others go to private and parochial schools.

Hempstead has seven elementary schools, one middle school, currently housed in the former high school and a nearby elementary school, and one high school. A new facility for a middle school has been proposed, but construction has not yet commenced.

As in the school system, the students in the program are predominantly black. They range in age from 6 to 14 years (where sixth grades have been included). The students have achieved significant academic progress and they are very enthusiastic about the program, as their classroom behavior and their response on the attitudinal evaluation done by Teaching and Learning Research Corporation demonstrate. The staff (teachers and principals) is approximately 65 percent white; 33 percent black; and 2 percent Spanish-speaking.

## WHY

Although we tend increasingly to disdain tests which quantifiably measure the achievement of a child, no one could gainsay the importance of the ability to read or the ability to calculate. When entire communities of children consistently test poorly in comparison with other children of the same age and background, the children are not responsible. In the past, many educators conveniently tied a child's failure to his background or home environment. Outrage at the injustices perpetuated by such an interpretation and recent research have led concerned administrators, teachers and parents to demand that schools which do not teach change their plans of action. Hempstead realized that a new educational system was required -- a system responsive to new needs in the community and children. Through its different method of organization and teaching, the Directed Learning Program sought to break down the constructing traditional structure and replace it with a new framework and atmosphere in which Hempstead children would learn and thrive.

## WHEN

In the school year 1968-69, the New York Pupils Evaluation Program (PEP) tests showed 18 percent of Hempstead first graders were in the low range in reading readiness compared with only 8 percent average for Nassau County. Furthermore, as Hempstead children progressed, the discrepancy increased; this increase indicated that the educational program was neither compensating for nor rectifying the initial disparities or disadvantages; 30 percent of the Hempstead third graders were in the low range

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in reading as compared with only a 13 percent average for Nassau County; similarly, in math, 28 percent of the Hempstead third graders were in the low range, as compared with only 18 percent of Nassau County third graders.

Such a disastrous state of affairs demanded a drastic antidote, and the Directed Learning Program was the result. Initiated in 1967, the Directed Learning Program evolved from the collaborative efforts of several individuals and groups -- the Superintendent of Schools, the Assistant Superintendent for Instruction and Curriculum, the Curriculum Coordinating Committee of Teachers and Administrators, the Director of Special Programs, the Title I Advisory Council and individual classroom teachers.

Because the malaise affected the entire district and the situation demanded urgent attention, the program was instituted on a district-wide basis. In the first year, grades 1-3 in all seven elementary schools participated. In the fall of 1970, grades 4-5 were added to the program, and in the fall of 1971, some of the sixth grades also were included. Although it differed greatly from the traditional graded classroom, the Directed Learning Program did not require any drastic alteration of existing classroom space; nor, at the outset, did it seem to require much in the way of pre-service preparation for the teaching staff, training considerations which might impede the program's commencement. The district revised the curriculum to create a non-graded learning schedule of several competency levels and Hempstead was ready to embark on the Directed Learning Program.

## WHAT

The architects of the Directed Learning Program felt that each child's educational experience and academic achievement would be most effectively realized by a non-graded learning environment and a multi-level program of achievement. In the original proposal, the objectives of the Directed Learning Program are stated as follows:

1. Develop competence in reading and arithmetic
2. Develop a non-graded learning environment that permits each child to progress at his or her own individual pace
3. Improve motivation, self-image, aspiration level by reducing the experience of failure and enhancing the experience of success.

To achieve these objectives, Hempstead effected a new intra-school organizational plan; developed a curriculum design to foster individual instruction and learning; and established a non-graded learning situation. Together the three components equal a successful approach to the teaching-learning process.

## HOW

As in many of the exemplary projects, in Hempstead a new organizational pattern emerged from the Directed Learning Program. The traditional class was eliminated; two new entities -- the homebase and the educational family -- replaced it.

## THE HOMEBASE

The homebase has between 20 and 30 pupils and a teacher and teacher's aide. Unlike traditional classes where the difference in pupil ages usually does not exceed 10 months, home bases have children who range in age by at least two separate years. In addition to variance in age, children are grouped heterogeneously in the homebases according to the following characteristics:

- present intellectual achievement
- social interaction
- motivation for learning
- emotional response
- rate of previous achievement

## THE EDUCATIONAL FAMILY

Four homebases with their teachers and teachers aides comprise an educational family. Each family of approximately 100-120 pupils is supervised by a Learning Director, whose position was created for this program. Primary Educational Families are composed of homebases with children aged 6-9 and include levels equivalent to first, second, and third grade. Similarly, the traditional fourth, fifth, and in some instances sixth grades have been replaced by Intermediate Families of homebases with pupils aged 9-13 or 14. In addition to homebase teachers, each educational family has the services of reading, guidance, art, music, and physical education specialists.

Pupils remain in homebase groups for reading comprehension skills, language arts and social studies; homebase teachers teach these subjects.

Six and seven year olds learn math and science from their homebase teachers; students aged eight and older are regrouped, according to math performance, for math and science. In addition, by fall of 1972, teachers within an educational family will teach either math or science, thus increasing the degree of teacher-subject specialization.

HOW (con'd) THE D.L.P. CURRICULUM

Since poor academic performance precipitated the decision to establish the Directed Learning Program, an effective curriculum is of primary importance. The curriculum consists of a series of levels: when a child has attained one level, he moves on to the next. In traditional classes, success and failure face each other across an unbridgeable chasm. The child is either a fast learner or a slow one -- the situation does not encourage a mixture of both. The use of distinct measurable levels in different subjects enables a child to feel successful; to be at one level in math and another in reading; and to work at a rate uniquely his own. The quick learner can proceed at a rapid rate; the slow learner at another, to the detriment of neither. After the successful completion of one level, the child advances to the next. The teacher is free to supplement the program curriculum with additional materials if he or she believes they are appropriate.

The Program Information Report states:

Since the program is individually oriented emphasis will be placed on the utilization of varied instructional materials.... It is expected that a wide range of program materials will be used in accordance with the individual student's style of learning and special needs.

At present there are 16 levels of achievement in the Directed Learning Program; as the program is expanded to include additional grades, the number levels will be increased. The child will usually spend three years to complete the primary family levels; at the end of that time, he will move on to the intermediate family and intermediate levels with his peers in the subjects he has completed but will be able to continue at the primary level in areas where he still lacks competency. Thus neither age grouping is exclusive, i.e. ten year olds can be involved in primary level tasks, and eight year olds in intermediate level tasks.

Worksheets exist for each level, and successful completion of each skill and level is measured by a specific competency test. A sample pupil worksheet for level X and a Teacher's Guide for Competency Evaluation (for level 1) follow:

**COMPETENCY EVALUATION--PUPIL WORKSHEET #53**  
**Level X - Vocabulary Acquisition Skill - 2: Explains specific meaning of word used in context**

Name \_\_\_\_\_ Date \_\_\_\_\_

Find a word at the top of the sheet which means about the same thing as the underlined word in each sentence. Write that word on the line under the sentence.

flag	trip	wagon	funny face	meadow
shears	kiln	also	baggage	trucks

Example: Bill and Joe took turns riding a cart on the walk.

wagon



1. They went on a long journey on their vacation.  
\_\_\_\_\_
2. The flag bearer carried the school banner onto the stage.  
\_\_\_\_\_
3. The cows grazed in the fresh green pastures.  
\_\_\_\_\_
4. The children made masks from paper bags.  
\_\_\_\_\_
5. Our clay bowls were baked in an oven.  
\_\_\_\_\_
6. When we left the airplane, we claimed our luggage in the airport.  
\_\_\_\_\_

COMPETENCY EVALUATION

LEVEL 1 READING SKILLS

TEACHER GUIDE

**Skill 9:** Recognizes and names colors  
Teacher: I am going to show you some crayons.  
As I show you each one tell me what color it is.  
(Use--red - blue - yellow - green - orange -  
purple - black - brown - white)

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**Skill 10:** Has adequate span of attention for task  
  
Rate on teacher judgment over a period of time.

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**Skill 11:** Speaks in sentences  
Teacher: Try to elicit sentences from pupil by asking questions, as: What do you like to do after school?  
What do you like best about school? What do you like to watch on television?

Note use of sentence form, length of sentence, general language facility.

Rate on teacher judgment over a period of time.

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**Skill 12:** Enunciates and pronounces clearly

Rate on teacher judgment over a period of time.

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**Skill 13:** Recognizes name in print

Teacher: I am going to show you the names of three children in our class. Then I will ask you to point to your name.

Show child three names in manuscript or three cards -- use both first and last name.

John Doe  
Susan Little  
Jane Smith

Point to your name.

---

#### HOW (cont.)

A Directed Learning Project teacher makes use of several learning situations to maximize the learning experience of each child. All of the groups take place within the confines of the regular classroom; on occasion, adjoining rooms may be used. However, the new middle school will permit more flexible use of space. The Teachers Handbook identifies the four kinds of learning groups and representative activities.

1. Individual

- a. to reinforce initial learning through practice (as in arithmetic)
- b. to provide opportunities to explore in depth areas of special interest (as through reading and research, laboratory experiences, etc.)
- c. to develop specialized talents (as in art, music, physical education)

- d. to counsel on problems

2. Small Group (5-10 pupils)

- a. to bring together pupils of a smaller skill level to further develop the skill (as in work analysis)
- b. to permit opportunities for full discussion and exploration of an area of interest
- c. to permit opportunities for pupils to work together
- d. to evaluate status or growth in skill or subject areas (as in oral reading)

3. Regular Class (20-30 pupils approximately)

- a. some resemble the above classifications
- b. others may be similar to large groups

4. Large Groups

- a. to provide for more efficient use of mechanical aids and community experts
- b. to provide higher quality instruction because of time available for preparation
- c. to save staff time by eliminating repetition
- d. to provide a setting for presentation of a common foundation of knowledge
- e. to free staff for other activities (preparation, planning, conferences, etc.)

Subject periods are usually 20-30 minutes in length, although large group activities may involve more time. The teacher may spend the entire period at work with individuals, small groups, the homebase or a large group. On the other hand, she may divide the class time and utilize several of these groupings within a period. Since the program emphasizes individualization,

individual and small group instruction prevail. Classrooms in which the Directed Learning Program is in effect have space set aside for the following kinds of activities:

Directed: those which require the teacher's presence

Semi-Directed: those which encourage semi-independent activity

Independent: those which demand independent action by the child; these are peer and student dominated

Listening-viewing: those which demand independent attention to a task

Students work on pre-assigned tasks a good part of the time. In a Directed Learning Program classroom the children work independently, oblivious to distractions, and seem to enjoy the tasks while they work on them. They volunteer to answer, go to the board, etc. The independent, highly individualized orientation of the program results in less interaction with teachers, aides, and other students. Teachers try to provide increasingly individualized instruction and avail themselves of both teachers aides and more advanced students to achieve it. In one observed classroom, in which DISTAR was in use, chronic non-readers were reading aloud to each other -- on their own -- with great enthusiasm. In some homebases, teachers have weekly conferences with each student to evaluate work and plan assignments in each area for the next week.

Without careful planning and management, however, the teacher finds it difficult to keep several projects going at once -- a necessity in an individualized program -- and the children become restless if they finish the task before the rest of the group and have nothing to do.

To help a child achieve and know it is central to the entire Directed Learning Program. The teachers work toward this goal in the classroom through praise, records of the child's accomplishments, and prominent displays of student work. An aura of enthusiasm and success pervades the Directed Learning Program classroom.

WHO (cont'd)

#### PERSONNEL

The totally new organization required the creation of a new position, the Learning Director. However, the success of the program hinges on the commitment and expertise of the homebase teachers, aided by the paraprofessional teacher aides. Realizing that the program, to be effective, must also inspire the parents and the community, Hempstead has actively sought their support.

✓ Each educational family of 100-120 students is under the direction of a Learning Director. The Director, whose position was created for the program, is responsible for "diagnosing, prescribing, and evaluating the effectiveness of the program for each child within the educational family." The Learning Directors are responsible for the weekly family planning sessions and assist in the training of teachers and paraprofessionals. They also conducted the I-scale evaluation of teachers.

Since the program encompasses all of the elementary schools in the district, all of the teachers at these levels are involved in the program. Thus the only criteria are those required for teaching within the district.

In the year 1971-72, 77 teachers, both black and white, were in the program. Teachers must expend enormous quantities of time on planning and on the copious paper work which the Directed Learning Program entails. Although the teachers believe that more preparation and more time for planning would heighten their effectiveness, most of them are very enthusiastic and committed to the Directed Learning Program. The system has wisely encouraged teachers to design appraisal strategies giving them a chance to apply their experience and knowledge to the appraisal of learning characteristics of individual children. Though such strategies have not been achieved as yet in the evaluative field in general, the Hempstead efforts have been helpful to individual teachers and are praiseworthy.

Teachers stress that the aides are invaluable in the execution of the program. There are 77 aides in the program; ideally, each educational family will have four aides. Most of the paraprofessionals are black; they vary in age, and there are a few men. They are from the community, and many of them are parents with children in the program. They have good rapport with the students. Aides' duties are classified by the school system as those that involve pupils and those that do not. They participate in weekly planning sessions and in-service training.

The Directed Learning Program requires a great deal of the teacher in classroom management, in planning, and in general attitudes toward the children. Because the program was initiated on a district-wide basis, it was not feasible to select a group for intensive preprogram training nor to conduct an intensive program for everyone. However, subsequent teacher



experience and an evaluation of the Directed Learning Program teaching indicated that a strong in-service training program was urgently needed. In several observed classrooms, teachers did not individualize instruction; or if they were working with a small group, the rest of the class was restless or not purposefully occupied; in some instances, children were still in a graded situation. To remedy this situation, Hempstead has instituted an intensive in-service program that stresses individualized instruction and classroom management. Although the Directed Learning Program does not yet involve the high school, high school teachers also participate in the program of in-service. This in-service program includes the development of video-tapes demonstrating the process of individualized instruction.

As further support for the teachers who are recognized as the key to effective program implementation, schedules are being restructured to allow for more teacher planning time. In addition, a consultant has been assigned to each elementary school to help staff with implementation, and the progress of the staff is monitored with evaluations.

WHO

Through various strategies, Hempstead aspires to involve parents in the program to gain their support and cooperation. At the beginning of the school year, parents receive a brochure, A Parents' Guide to the Directed Learning Program. The guide discusses the difference between a traditional graded program and the Directed Learning Program; explains the concepts of "homebase," Educational family," and "non-graded learn-

ing curriculum"; and includes a schedule for a typical school day. A monthly newsletter is also sent to the parents.

### THE COMMUNITY

Parents' Committees exist in each school, and the Superintendent holds monthly appointment hours to speak with parents. In addition, the PTA Advisory Council, which is well-informed and outspoken, advises the Superintendent of parents' concerns. Several parents are also paraprofessional aides in the program, and School Board meetings are open to the public.

Despite all these opportunities, some of the Advisory Council members feel that broader parent participation is needed, particularly by Spanish-speaking parents. In its initial efforts to assess the needs of the community, the district consulted only a few small groups. Although the parents are satisfied with the work of personnel in the program, they are cognizant of the need to improve certain aspects of the Directed Learning Program. In order to increase and broaden the base of parent support and involvement, the district is surveying more of the community in its current needs assessment.

From the program's inception, various community groups, including the Title I Advisory Council, CORE, and the NAACP, have been involved in the program; CORE, in particular, has closely monitored it. Enthusiastic about the Directed Learning Program, the local newspaper, the Hempstead Beacon actively supports the program, and most of its major news stories



concern the schools.

HOW (cont'd)

### COST

The total cost for the current year of the project is \$621,168. Hempstead spends approximately \$1,663 per pupil in non-federal funds. Within the Directed Learning Program, the Title I cost per pupil is approximately \$300.

### EVALUATION

Since the commencement of the Directed Learning Program, Hempstead has conducted three different kinds of evaluations to measure its effectiveness: (1) standardized achievement tests, which were administered to a random sample for a pre-test in the fall, 1970, term and the entire district in the post-test in the spring, 1971, term; (2) an attitudinal test, which was administered to a random sample of pupils in the fall, 1971 term; and (3) an evaluation of teachers, in which the 1-scale was used to determine the amount of individualized instruction given by teachers in the program.

The first evaluation, that of achievement, produced significant findings. The test instruments were the Metropolitan '70 and Stanford Achievement tests. The predominant reason for the initiation of the Directed Learning Program was to improve the level of pupil achievement in the Hempstead schools. The test scores are strong evidence that this goal is being attained. In its Report of Achievement Tests, the Teaching and Learning Corporation

stated:

Examination of the standardized test data indicates that learning under the Directed Learning Program has been a highly successful experience.

Some of the significant findings discussed in the Report are:

--In the spring testing, after one year of the Directed Learning Program, the first grade (which had not been tested in the pre-test) scored three months in reading skills (word knowledge, word analysis, and reading) and approximately five months in mathematics above the national norm group.

--Progress during the seven months from October to May has been, in almost every skill area and in all grades with the exception of the fifth, greater than that "expected" for groups beginning the year on grade level.

--In both the Word Knowledge and Reading tests, there were no significant differences at the .05 level between the groups in the Directed Learning Program for the second year. On the other hand, those groups in the Directed Learning Program for the second year did show significantly greater average pre-test differences than that of the first in the Directed Learning Program on the math subtest. It must be remembered that these analyses (of the second, third, and fifth grades) were not concerned with levels of achievement, but rather with a comparison of pre-post test differences during the 1970-71 academic year.

--In the post-test, the fifth graders, for whom 1970-71 was the first year of the Directed Learning Program as well as the first year of the intermediate families, showed a reversal or halting of the pre-test retardation except for one test, reading, in which the year's growth did not equal that of the standardization group. In all of the pre-tests, this group had been below the expected average by between five and ten months.

In an attitudinal study administered by Teaching and Learning Research Corporation in the fall of 1972, interviewers collected data on "students" self

concept of ability to do school work"; "students' attitudes about school"; and "students' perception of their acceptance by others in the school." A 25 percent random sample was chosen from each class in the Directed Learning Program. Some of the study findings are:

--Students in general feel positively in regard to their ability to do average or better than average work in school.

--In the intermediate families, 67 percent of the students reported that they feel they can finish high school and almost all of those sampled, 98 percent, felt that they could do average or superior work if they went on to college.

--Of the 700 students sampled in the study, almost 80 percent said that they enjoyed coming to school every day, while less than 10 percent said they did not enjoy coming to school.

--Of all the people mentioned by students as caring about how well they do in school, 29 percent were teachers or other personnel. Of the 700 students interviewed, 360 or approximately 51 percent mentioned his or her teacher. In comparison, while parents comprise 41 percent of the list of people mentioned, 516 students, or approximately 74 percent, indicated that their parents care about how well they do in school.

✓ --While there are approximately 75 percent black students in the sample, of those saying they would be one of the best students on finishing their present school, 80 percent were black; 74 percent said they would be average, and only 55 percent said they would be one of the poorer students. Using a square analysis, researchers found a significant difference in this response between the black and non-black student. The black student feels he will do better in proportion to what would be normally expected from his representation in the sample.

--Data indicated that black students' responses are generally more positive about themselves and their attitudes toward school than would normally have been predicted from the proportion of black students in the sample.

In the fall of 1972, Teaching and Learning Research Corporation also conducted an evaluation of the degree of individualized teaching by Directed Learning Program teachers. The evaluation used the I-Scale, an instrument developed to test this dimension. Utilizing Charles Danowski's characteristics of individualization, the scale results in a total "I-Score", obtained by multiplying each score per variable by the number of Danowski characteristics relating to that variable. Danowski's characteristics for teachers are dichotomized under the headings: (1) Objectives, (2) Planning and Preparation, (3) Communication-Direction, (4) Communication-Message, (5) Function, and (6) Evaluation. Pupil characteristics are dichotomized under: (1) Objectives, (2) Planning and Preparation, and (3) Communication-Direction.

### EFFECTIVENESS

This project is based on the premise that individualized planning of instruction can result in improving reading and mathematics achievement, as well as improved motivation, self-image, and level of aspiration in elementary school pupils. In order to provide for greater flexibility in the grouping of pupils and the use of teachers, the project has radically changed the organization of the school and design of its curriculum. Although the content of the learning tasks is rather traditional, there has been a serious effort to make the curriculum sensitive to individual learning rates, to pupil interests, and to some extent, to differences in learning style. The children and the teachers have been organized into small units (classes) called the

"homebase" and larger units (composed of four homebases) called the "educational family". This organizational pattern allows for the heterogeneous grouping of youngsters for some learning experiences and homogeneous grouping for other types of learning.

There are many approaches to the individualization of learning. Essential to an adequate system is individual prescription, based on extensive knowledge of each learner and a pool of learning experience units which reflect, for example, differences in rates of learning, temperamental traits, cognitive style, interest, and the varying affective states the child brings to the learning situation. Few, if any programs fully meet this standard. Although this project is several cuts above the traditional in public education, it does not yet match this level of sophistication. Appraisal processes are used to guide the decisions of teachers in grouping and in planning instructional experiences for children. However, available appraisal procedures are somewhat unsophisticated and do not allow for the adequate identification of subtleties in learning function which should be considered. New efforts in IPI will need to give greater attention to the development of such strategies. This effort at individualization in Hempstead schools seems to provide an opportunity for individuals to function in groups that are organized to be responsive to certain pupil needs. For example, individual, as opposed to small group, learning experiences are designed to provide (1) reinforcement of initial learning through practice, (2) opportunities for in-depth exploration of areas of special interest, (3) development of specialized talents, and (4) attention to personal problems. Though none of these speak



directly to problems of style or temperament, conditions are created which would allow emphasis to be given to some or all of these types of problems.

There are some problems in this project. The in-service training of the staff has been inadequate; however recent changes instituted by the administration will contribute greatly to the correction of this inadequacy. The range and variety of learning task may be too narrow. Exceptionally bright children may show limited benefit from the program because the ceiling is too low, while underachieving pupils may not be adequately reached by the levels at which many of the learning experiences are set. This is a recurring problem in individualized instruction and is not peculiar to Hempstead. Particular care must be taken to provide a wide enough range of options to reach students at both ends of the continuum and arrangements must be made to insure that independent study arrangements do not leave underachieving students to flounder.

Communication among staff members, between staff members and pupils, as well as between staff and parents is a critical dimension of programs which seek to be learner directive and individualized. It is important that staff members pool their knowledge and understanding of pupils and pupil needs. Interpretation of this understanding and the strategies that flow from it must be communicated to pupils. It is essential that planning for pupils and their progress in relation to educational treatments, as well as in relation to pupil needs, be communicated to parents. The expanding opportunities for staff conferences, teacher-pupil and teacher-parent conferences speak to this need.

In the Hempstead effort at directed individualized learning we have an example of a major effort at the application of one of the essentially new and appropriate concepts in education. It is unique in its system-wide commitment, there is enthusiasm and high interest on the part of staff, and great progress has been made in applying the basic elements of the concept across all classes. That it is not yet perfected is of little moment. That it is in operation, constantly being refined and beginning to make differences in the educational development of children commend it to public notice as an important development in public education.

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