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ABSTRACT

This project, located in a rural community in upstate New York, has, with very limited resources, set itself the task of humanizing and individualizing its total education program. The school district is well on the way toward the achievement of that goal in its elementary school where two special programs have been in operation for six years. These programs are the Development Skills Center, which is based on individualized programs of learning, and a Remedial Physical Education Program, which seeks to improve the health and general physical functioning of its students as a basis for facilitating their educational development. For the first few years, the center provided mainly enrichment experiences. Although center activities now focus on developing more specifically academic skills, the basic philosophy still remains the same; that is, it is assumed that a child is not succeeding in school because, for any number of reasons, he or she is not as happy there as he could be. Proceeding on this assumption, the school provides the facilities of the center so that such children can be offered several hours each week in which adults concentrate special attention on them to deal with their needs and help them meet with success. (Author/JM)

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DEVELOPMENTAL SKILLS CENTER
REMEDIAL PHYSICAL EDUCATION PROGRAM
(Greene, New York)

U.S. DEPARTMENT OF HEALTH,
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EDUCATION

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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 at 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.

I. Introduction

This project, located in a rural community, has, with very limited resources, set for itself the task of humanizing and individualizing its total educational program. The school district is well on the way toward the achievement of that goal in its elementary school where two special programs have been in operation for six years. These programs are the Developmental Skills Center, which is based on individualized programs of learning, and a Remedial Physical Education program, which seeks to improve the health and general physical functioning of its students as a basis for facilitating their educational development.

II. Setting

The village of Greene is located just about twenty miles northeast of Binghamton in upstate New York. Nestled around a tree-shaded little square of about two blocks, the village itself has a population of about 2,300, with an equal number living in the gently rolling hills surrounding the town. The Chenango River flows not far away from the main road leading to town, contributing to the scenic rural setting.

A major influence in the life of the town is the Raymond Corporation, manufacturers of fork-lift trucks. The Greene plant of the Raymond Corporation, employs some 800 people. Many others in the Greene area work at farming while some commute to jobs in Binghamton. Virtually all of the residents of Greene are white, and although the majority could be characterized as middle class, available figures from welfare, school lunch programs,

health and housing surveys show that approximately 13.2% of children in the Greene public schools come from lower-income families. Many of these live out in the hills, under appalling conditions typical of the worst forms of rural poverty. Trips into town are rare for these children, and many have seen little but their own homes and the inside of a car by the time they reach school age. The Greene school system consists of a high school, housing grades 7-12, a primary building, with kindergarten through fourth grade, and an intermediate building for fifth and sixth graders. Both the primary and intermediate buildings have been built in the last ten years and utilize a clover leaf plan, with grade levels grouped together in each wing, and supportive services appropriately located.

The school district of Greene is administered by a district superintendent, who has under him the principal of the high school and the principal of the elementary school, both primary and secondary divisions. The elected school board of five members is chaired by the local banker, and also on it are two other businessmen, one of whom is George Raymond, Jr. of the Raymond Corporation; an engineer who commutes to work in Binghamton; and one woman, a former music teacher in the Greene schools. The district operated on an annual budget of \$2,370,410.50 in 1971-1972, and the per pupil expenditure was \$1,281.

III. The Developmental Skills Center and Remedial Physical Education - Overview

Children in the elementary section of Greene Central School may receive many different types of special attention, but two of the more formal

varieties of attention are the Developmental Skills Center and the Remedial Physical Education program. Much credit for the origin of both must go to the elementary school principal. Along with several concerned teachers he set up the center arrangement some six years ago to provide for each child who was having difficulty succeeding in the classroom environment regular periods of more individualized attention to his or her needs. For the first few years, the Center provided mainly "enrichment" experiences, offering a variety of activities and field trips to children who were seen as handicapped in the school environment by having previously had very limited kinds of exposure to experiences outside the home. Although Center activities now focus on developing more specifically academic skills, the basic philosophy still remains the same; that is, it is assumed that a child is not succeeding in school because, for any number of reasons, he or she is not as happy there as he could be. Proceeding on this assumption, the school provided the facilities of the Center so that such children can be offered several hours each week in which adults concentrate special attention on them to deal with their needs and help them meet with success.

Similarly, the Remedial Physical Education program was established to give special help to children who are not performing as well as they might because of psychomotor difficulties, or even because they have not had a chance to develop the kinds of social skills necessary to get along satisfactorily in the classroom. Recognizing that the Center might not be the appropriate place for dealing with all these difficulties, the principal met with a young physical education teacher and discussed the idea of a remedial program with

her. With extremely limited funds available for this kind of innovation, he was able to do no more than provide her with an extensive collection of books and journals on the subject of physiologically-based learning difficulties. On the basis of this research, she was able to set up a program which she operates every afternoon, tailoring a variety of activities to the needs of small groups who meet with her for about forty minutes every day.

IV. Project Operation

Children are programmed into the Center by arrangement between their classroom teachers and the Director of the Center, so that they may receive in the Center the attention they need in specific skill areas but at the same time not miss the class time devoted to those same areas. Each child is given a period in the Center ranging from twenty to forty minutes, either once or twice a day, according to his needs as they are perceived by his teacher and the Director. The facilities available consist of several rooms, centrally located among other classrooms, but small, cozy, and inconspicuous. They are carpeted, and furnished comfortably and attractively, but no effort is made to decorate them elaborately; there are no bulletin boards, and the walls are bare except for bookshelves and blackboards. A very basic part of the Center philosophy, and for that matter of the philosophy of the Greene Central School, is that the child belongs with his peers in "normal" classroom or other social settings; no matter what his individual needs may be, it is thought he will benefit most by being isolated as little as possible from his contemporaries, and for this reason, there is no attempt to make the Center a place with which the child especially identi-

fies. Accordingly, children who attend the Center are with their own classes for music, art and gym. The Center is to be perceived as merely another facility which the school makes available to the students, like the library, the gymnasium, or the nurse's office.

The various rooms which constitute the Center are equipped with a large variety of published reading and mathematics programs and materials which aid in teaching these subjects. Math workbooks include some of those published by Holt, Rinehart and Winston; Science Research Associates; Harcourt, Brace and World; and Houghton Mifflin. Other math materials include colored beads, cubes, cylinders, and other geometric shapes; flannel board materials; flash cards; clock dials; and a great variety of other tactile-kinesthetic materials. A similar variety is reflected in reading materials, and the Center also includes many games, puzzles, and other "play" materials, as well as a filmstrip projector, language master, tapes, and records. In rooms of varying size, as many as four groups, each with no more than four or five children, may be working at these activities at any given time. In some cases, children work on a one-to-one basis with an adult, and they may even have a room to themselves for their sessions. In all, approximately 100 children are in the Center at some time every day.

Except for the Director, who oversees the operation of the Center for first and second grades and another master teacher who is in charge of the facilities for third and fourth grades, the Center is staffed entirely by paraprofessionals, usually mothers of other children in the Greene school, of educational backgrounds ranging from high school degrees to several years

of college. Perhaps the main qualification of the aides, however, is their affection for children, for the job of the aides in the Greene system is seen as working with children, and they are expected to perform this function well. Five aides work in the first-second grade Center facility, and two work with third and fourth grades.

The process of selecting children for the Center begins as early as kindergarten, though no children this age are actually in the center. The Director plays a very large role in this selection process, carefully observing each kindergarten class and noting those children whose performance indicates that they may need more specialized attention to succeed in first grade. She is assisted in this task by the kindergarten teachers and aides, who are careful to note each child's conversational abilities, his social interaction skills, and the apparent extent of his exposure outside of the home. At the end of the year, as a result of teacher and aide observations, the Director's observations, and scores on the Metropolitan Readiness Test, certain children are selected for further testing. Some testing is done by a psychologist and she meets with the Director and the classroom teacher to discuss the child's needs. Initially, children in the Center are randomly grouped with aides, with grade level being the only criterion; occasionally when it is clear that a child is particularly aggressive, particularly insecure, or has some similar problem, he or she can be immediately placed accordingly. Soon, however, as the children can be observed at work, they are regrouped according to their needs as perceived by the aides and the Director. Initially, they are offered work in beginning math, reading, and motor

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skills, but as they progress, individual weaknesses and strengths are identified and the aides can choose materials and approaches based on these.

Approaches to diagnosis and prescription in the Center are both formal and informal, and every effort is made to examine the child comprehensively. A number of standardized diagnostic tests are administered when staff think they can yield useful information on some aspects of the child's functioning. In addition, both the Director and the aides watch each child's day-to-day performance, checking for nervousness, inability or reluctance to communicate, signs of poor health or problems at home. If health or family problems are suspected, the nurse and/or principal is called in to get more information on the child. Each student's activities are planned daily according to perceived needs and strengths. If problems at home seem to be worrying a child, Center staff feel that giving affection and comfort to him or her is at least as much a part of their function as teaching the letters of the alphabet; as more than one aide points out, the two are inseparable - the "emotional" need is going to interfere with the "intellectual" functioning because in the child, there is no such distinction.

Much of the prescription in the Center is done on a trial and error basis, for it seems there are no formal tests which really take into account all factors operating and interacting to influence the child's performance, and therefore, it is not often possible to arrive at an effective prescription by such objective, scientific means. Often, one set of materials may be tried with a child or group of children and used until they stop making progress; then another type of material is tried, or another, or another - un-

til one is found which works well for both aide and children. The reason is not always clear, so it is necessary to proceed on the basis of apparent effectiveness.

If one particular approach seems to work well with a child, the aides emphasize that approach; one aide found that a particular student learned letters better by tactile approaches, so she was able to provide him with a variety of materials suited to his needs; another aide discovered, almost by accident that one boy was especially motivated to perform when she organized the day's materials into a kind of informal game, so she frequently gives him an opportunity to compete, and earn small rewards. With other children, many approaches may be tried and it may be that for a time, they can only function successfully on a one-to-one relationship. With still others, the staff must occasionally conclude that they are just "tired" - and these children are then given a chance to 'rest' or 'coast along' for awhile, playing games, going to the library for reading, or conversing with an aide; these kinds of activities are viewed as no less a part of the child's education than any other -- they are seen as just another way to meet the needs of the student as far as they can be perceived.

Most children in the Center have been put there as a result of this kindergarten screening process, for there is a very heavy emphasis on early intervention. Staff members believe that it makes sense if for no other reason than that the child must not be given a chance to decide that he dislikes school. If it can be assured that each continues to succeed in school experiences, this likelihood is greatly diminished. Every child

who is in the Center in first grade is automatically programmed in again at the beginning of the second, and most stay throughout their second year. By the third grade, most children can be gradually programmed out, with some continuing attention to reading. (The Center for third and fourth graders focuses exclusively on reading both for those children who are continuing on from first grade, and those who are referred later on -- a limitation which is imposed because of available resources more than for any pedagogical reason.) On a daily basis, the operations of the Center are planned early in the morning, with the aides and the Director meeting to discuss each child, report progress or problems, and decide on the best course to follow for that day's session with each student. When a particular problem arises, the Director, who knows all the materials in the Center very well, can usually recommend some change in material or approach, based on her previous experiences. Occasionally, even the adult who works with a child may be changed, for it is possible that a more beneficial interaction may result from a new aide-student combination.

An even greater flexibility is possible in the Remedial Physical Education program, for it is conducted by one teacher, working with small groups of perhaps four to eight children at one time. These groups consist of children with a great variety of characteristics which have caused them to be included in the program. Some have been perceived as simply not feeling sufficiently comfortable in large group situations, and the physical education class is a chance for them to interact with much smaller numbers of contemporaries, and receive individual attention from an adult at the same

time. Some children in the classes may be classified as hyperactive, and the extra break from classroom routine gives them a chance to let off a little steam. Many more, however, are placed in the program because they have identifiable physiological characteristics which affect their performance in school. Each session is filled with a variety of activities designed to attack these problems and at the same time allow the students to have fun together. The teacher finds something to praise in every child's performance. In these ways, the program is designed to meet its stated goals of developing:

1. fine muscle coordination
2. concentration
3. visual discrimination of size
4. coordination
5. balance
6. social communication
 - a. small group participation
 - b. learning to share with others
 - c. learning to play with others
 - d. acceptance within group
7. a feeling of success

A day's activities may include running after a rolling hoop which is painted different colors and grasping it by the color named by the teacher, to develop eye-hand coordination; handling of balls, bean bags and balloons, also for eye-hand coordination; playing Simon Says, doing imitations of

animals or machines, or listening to stories or records, to develop skills in following directions, listening and alertness; jumping or climbing ropes, hopscotch, walking beams, batting a ball, or maneuvering obstacle courses to aid balance, coordination, timing, and strength development. These are only a few of the activities used, but no matter what the program calls for, spirits are always kept high by a cheerful teacher; the most important goal seems to be to have fun.

V. The Larger Context

It is not simply the day-to-day operation of the Center and the Remedial Physical Education classes which explains the quality of education which is offered to children in the Greene Central School. Some other aspects of school functioning must necessarily be described at the same time. It has already been noted that the Skills Center is viewed as just another supportive facility, like the library, lunchroom, or nurse's office. In Greene, however, this statement takes on a wholly different meaning than it would have in most schools, for services such as these are so fully integrated into the education of every child that they hardly seem less familiar to him than arithmetic or reading. Lunch, for example, is served in a small kitchen near the center of the school building, a space which is covered with an attractive bulletin board during other hours of the day. Children pick up their trays and return to their rooms for lunch and free-time play activities. Every room has a television set, and classes may enjoy "Sesame Street," "The Electric Company," or other children's shows as they eat. Aides who perform classroom duties at other times during the day assist with serving lunches.

and they and the classroom teachers do a remarkable job of making this hour a cheerful, relaxing and friendly time for the children.

The library has a similar importance in the operation of the school. It is located in a prominent spot in the center of the building, and its carpeted, attractively furnished facilities look welcoming through a glass front. Children are always present here, wandering singly, in pairs, or in larger groups. Teachers are encouraged by the librarian as well as by the principal to send children here regularly or occasionally when it appears that a student can benefit from working alone at an individualized pace.

The school nurse considers herself, and makes herself, another important part of the total education experience at Greene. She shares her offices with a dental hygienist, and the school is equipped with a modern dental facility. The nurse sees her role as that of teacher, also, and a cut finger can become the occasion for an informal lesson on bacteria. In addition, she teaches more formal classes on various health-related subjects and tries to watch for signs of any health problems she may be able to observe in the children she sees from day to day; teachers are urged to come to her to discuss any problems they are having with children which could be health-related, and she frequently follows up on these referrals to the extent of visiting the child's home, counselling the parents, and doing whatever she can to help them take necessary steps to correct the situation. She has funds available to her to dispense at her own discretion for such things as clothing, shoes, or drug items, or any other need she may feel is an emergency. Through the cooperation of local community groups who

collect donated clothing, she can often meet these needs free of charge. When a kindergarten child missed many days of school, the nurse visited his home and found that his parents could not send him to school in the colder weather because he had no coat. More than once, she has seen children coming to school in winter weather wearing only sweaters; providing coats to children of proud but poor parents is a delicate task, but she visits the home and somehow accomplishes it. By maintaining close contact with as many families as possible, she is often able to inform classroom teachers and other personnel of the exact nature of a child's health problem, how it can be handled, and what the possible consequences may be. Such information often proves invaluable to Center personnel and the Remedial Physical Education teacher. In this way, communication flows both ways between the nurse's office and the rest of the school: teachers and Center staff may call to her attention a difficult problem, or she may be the one to inform them of a condition about which they were ignorant.

The performance of the school nurse is representative of a phenomenon which seems to occur throughout the school and community: each person involved in the educational process is aware of all the other people there to lend assistance, and feels free to call upon them. The Director of the Center is rarely to be found in her office, for she spends many hours meeting with teachers, the nurse, the principal, or representatives of outside agencies to try to find ways of helping not only the children in the Center, but other children in the school as well. When it was decided that a boy who had been having great difficulty in school should attend a special education class

in a nearby town (a decision which was made with great reluctance by the Greene school staff, who feel that any child should be able to have a place in a school carefully designed to meet individual needs) the Greene principal arranged to drive the boy to class one day so he could observe what was going on in the class and talk to the boy's teachers. Another child, referred to the county mental health clinic in a last effort to keep him out of the special education class, was driven, with his parents, to appointments at the clinic by the Director of the Center, who also visited the home occasionally to encourage the parents' support for their son. In more informal ways this spirit of concern is evidenced throughout the school. In the teachers' lounge or in the corridors before classes begin in the morning, the teachers can be found discussing the needs and progress of individual pupils. Teachers not only approach each other for advice, but also frequently consult the principal, or the Director of the Center, as well as the nurse. The aides in the Center receive the most useful kind of training from their conferences with the Director. These kinds of interactions provide an extremely effective form of in-service training, although more formal workshops are arranged on selected topics throughout the year.

This informality combined with concern extends to higher administrative levels in Greene. The elementary principal is responsible to a District Principal who functions as a superintendent. Educational decisions, however, are left almost entirely up to the principal, and there is a refreshing lack of bureaucratic complication involved in instituting any innovation. The principal is encouraged by the kind of faith placed in him

by the Board of Education and the chief administrator, and undoubtedly is influenced by this freedom to experiment more creatively in his school. Such flexibility is also handed down to individual classroom teachers, who are encouraged to run their classrooms in the style with which they feel most comfortable and successful. Some teachers work together a great deal, exchanging children at various times of the day so that they can provide a greater variety of needed experiences. Others work in self-contained classrooms. Their flexibility in this respect is greatly reinforced by the design of the school building, a most attractive facility which immediately suggests that school can be a happy place to go. In a clover leaf design, basic facilities such as the kitchen, library, and nurse's office are grouped near the center of the building, and grade level classrooms are grouped together in two of the "leaves," first and second grades together in one, and third and fourth together in the other. The classrooms have no doors, and there is a feeling of openness and airiness, yet no noise problem. Each pair of classrooms also opens onto each other as well as onto the outdoors, an arrangement which facilitates clustering if teachers wish to try it. The halls and one or two walls of each classroom are panelled in wood, and at least one classroom wall is covered in a burlap-like finish which can be used as a wide-open bulletin board. The open feeling is also created by huge windows which stretch across one part of each classroom.

Each one of these many elements of the operations of the Greene school is no doubt commendable in itself, but what is most impressive, and most effective, is the way they all operate together. A school which tried

to institute even a majority of these features, but which continued to regard them as separate aspects of the schools' functioning, would not encounter the degree of success found in Greene. Thanks to strong leadership and inspired personnel, and to many other factors such as those enumerated here, everything functions together so smoothly that it is impossible to identify individual factors which cause individual effects. And this fact is integrated into the philosophy of the school system so well that staff members operate this way as a matter of course. Not only do personnel operate as a team, but they succeed remarkably well at taking into account at any given moment a great many of the factors and interactions which are influencing the education of an individual child or the group as a whole. They function much the same way in the community. Teachers, aides, and parents live next door to each other and socialize together. The principal may be found playing cards or golf with teachers, Board of Education members, or parents of children in the school, whether they are professionals working in Binghamton or workers on the early shift at the Raymond plant. Community involvement does not even have to be cultivated in Greene; it just is.

One of the most extraordinary features of the program at Greene Central School is that it functions entirely on a budget provided by local revenues, with the exception of a Title I grant for the Developmental Skills Center and Remedial Physical Education program amounting to a meager \$46,566. It would seem that the programs' success is based largely on inspiration and determination!

VI. Problems

Among the areas which might be further developed in the Greene school is the extent of communication between staff members in the Skills Center and classroom teachers. In most instances, there is a valuable exchange of ideas, but in a few cases there seems to be insufficient understanding of the function and value of the Center on the part of classroom teachers.

One of the great ambitions of staff members and administrators in the Greene school is to set up a special education class in the building, so that Greene children do not have to be sent away if they cannot function successfully in existing facilities there. The dream is that such children could be programmed into regular classes for portions of each day or week, in amounts they could handle well, so that their educational treatment would not have to be an all-or-nothing decision.

VII. Why It Is Exemplary

The most overwhelming impression which the observer receives about the Greene Central School, and features such as the Developmental Skills Center and the Remedial Physical Education program, is this integration of so many aspects of the educational process, and their constant interaction. It is difficult, if not impossible, to decide the possible causes for this success. But it is possible to identify some other, rather more abstract, processes and conditions present in Greene which no doubt have an influence. An educational system, like other organizations, operates -- at conscious and unconscious levels -- in accordance with a certain philosophy,

which may be explicit, implicit, or a little of both. An understanding of the philosophy behind such an organization is a means of interpreting the ways it functions, and in Greene, it is possible to identify a number of assumptions which form the basis for the operation of the elementary school. Some of these assumptions are implicit in the system, some explicit and quite consciously reiterated as the basis for a variety of things which happen in that school. All, however, are quite evidently present in some form.

The assumption behind a great many activities which take place in Greene Central School is that children are not all alike, that they are most definitely separate individuals characterized by different strengths and deprivations at different times, and that it is an absolutely essential element of the educational process to take these individual differences into account in planning educational strategies. Perhaps because of this careful recognition of children as individuals, educators in Greene do not seem to think of students as being grouped into "disadvantaged" and "not disadvantaged" categories. Rather, staff members seem to be unusually skilled at recognizing a wide variety of conditions which may handicap or advance a child's progress in the school. Certain children are identified early in their school careers as coming from backgrounds where they may have been deprived of exposure experiences which seem to be prerequisite conditions for success in conventional teaching-learning structures.

Combined with this notion of the child as a unique individual is a concept of child development which gives equal importance to and tries to place appropriate emphasis on all aspects of a child's existence, taking in-

to account such factors as physiological development, emotional maturity, health status, home life, and many more. There is an absence of the kind of resigned attitude which implies that the school's business is "only" to deal with the child's "educational" development, on the assumption that educational development is a separate category to be filed apart from all the other aspects of a human life. It is exciting to see how this concept of integrated development is reflected in the concept of the school itself: all elements of the school are expected to work together for a child, are seen as being of equal importance. This assumption is even literally the foundation of the school, for the buildings themselves were designed under strong influences from school officials to facilitate operation along these philosophical lines. In the same way, this concept is reflected in the implicit attitude toward the definition of curriculum: the implicit, unquestioned assumption is that everything that happens to a child in school affects his development, that, therefore, the curriculum is the total experience.

Given all of these assumptions about what constitutes the educational process, it is perhaps easier to understand the prevailing fundamental belief among Greene educators that all children can learn. People in the Greene schools express the belief that education there is for all children, and they do not make exceptions, for the fact is that they have internalized a concept of education which holds that every child can learn given the appropriate conditions for his needs. An awareness of the variety of these conditions leads to the conclusion that what an educator does with a child does matter -- the only limitations on what can be accomplished are the limitations of the teacher's creativity; as a result, teachers in Greene

seem to be aware that they have a great deal of latitude, that they are free to try any educational technique, any classroom structure or other innovation -- if it is likely to further the education of the child. At the same time, it is also assumed that any member of the educational staff-- principal, nurse, aide, teacher, librarian, etc. -- will do whatever may be necessary to fill the child's needs. Any staff member may be found visiting a child's home, playing with him or her, giving out affection -- whatever may be perceived as filling a particular need of the child at a given moment.

Undoubtedly these kinds of assumptions would not have a great effect on the functioning of the school without the presence of what seems to be a very widespread, very genuine respect for children, for teachers, for aides, for parents. All members of the system are viewed as responsible evaluators, as agents of change; all ideas are listened to openly, and the attitude seems to be, "If it may work, why not try it?" This sort of atmosphere undoubtedly enables staff members to perform their functions in a more inspired and fulfilling way, and it also means that staff members dealing with children understand very clearly from their own experience that each individual must be made to feel that he or she has a worth, a notion which is conveyed in many different ways, but which is concretely displayed in the awareness of the fact that children have many different kinds of successes which should be recognized, whether that means spelling a word correctly, learning to button a coat, or wearing an especially pretty dress. Educators in Greene often voice their conviction that it is essential

for the child to have a positive attitude toward school; they take it as a matter of common sense that if a child likes what he is doing, he will learn more; additionally, for him to like what he is doing, he must himself feel liked and respected. It is perhaps because this conviction is so strong that the emphasis in Greene is an early identification of what may be negative attitudes toward school, so that an early and more effective start can be made to change these attitudes. Perhaps because attitudes are seen as so essential to the educational process, there is also the very strongly emphasized conviction in Greene that the child, no matter what his educational status at the moment, must be enabled to fit in where he belongs, with his peers, as much as he possibly can. Thus, no matter what special help he may be offered, he is always scheduled for the greatest amount of "normal" social interaction it is thought he can manage.

This kind of attention to attitudinal factors may be seen as part of a larger belief, expressed in different ways by people in the Greene school, that effective education relates intrinsically to the development of personal values, values which can facilitate leading a meaningful and productive life, values which enable the individual to contribute to his own fulfillment as well as to the social order. This is not the sort of assumption that is engraved on every school building portal; nor is it mouthed lightly by people who happen to have listened to the same speaker once in Greene. It is the kind of conviction that slips out, in various guises, in the course of an earnest conversation with a teacher, an aide, or a principal in Greene, and it is the kind of conviction that leads to the uncompromising guideline

that anything that is done in the school had better be done for the benefit of the child. It also leads to a remarkable situation in which, for once in a school system, the onus of responsibility is on the system to understand the child, not on the child to understand the system! Visitors are reminded of this commitment when they are handed an explanatory document which quotes Cruickshank:

If a child has a healthy body, but one that will not do what he wants it to; if he has eyes that see, but that do not see things the way other eyes see them; if he has ears that hear, but that have not learned to hear the way other ears do -- he cannot tell what his difficulty is: it just seems to him that he is always wrong. No one can see that he is not like everyone else, so he is expected to act like everyone else....

It is this genuine concern for the experience of the child himself that sets the educators of Greene apart from many others. They have written in another document:

Through every form of communication, we are made ever more aware that today's children will be tomorrow's adults, and, as such, will have all the responsibilities we link with the term. As John Hersey has said, "...the war must be fought. And this is one war that had better be fought well." This is our privilege.

This extraordinary statement, and the kinds of assumptions discussed above, seem to be one genuine and integral part of the educational system in Greene, seem to be shared by educators there, to be used in functional ways to guide operations and decision making in the school, from the office of the top administrator to the classroom. This philosophical tone repre-

sents only one of the many facets of Greene's community-school learning environment which seem to contribute to its effectiveness, and the interrelationships between these facets and many others which this report no doubt has neglected, contribute to its exemplary status.

Developmental Skills Center
Remedial Physical Education Program

Greene, New York

I. Philosophy

- American Association of School Administrators, Association for Supervision and Curriculum Development, and National Association of Secondary School Principals. A Climate for Individuality: A Statement of the Joint Project on the Individual and the School. Washington, D.C.: National Educational Association, Department of Rural Education, 1965.
- Archebault, Reginald D. (Ed.). John Dewey on Education, Selected Writings. New York: Modern Library, Inc., 1964.
- Ashton - Warner, Sylvia. Teacher. New York: Simon and Schuster, Inc., 1963.
- "Basic Human Values for Childhood Education," ACEI Bulletin. Washington, D.C.: The Association, 1963, page 50.
- Combs, Arthur W. and Snygg, Donald. Individual Behavior. New York: Harper and Row Publishers, 1959.
- Deutsch, M.P. "The Role of Social-Class in Language Development and Cognition." American Journal of Orthopsychiatry, 35 (1965): 78 - 88.
- Dewey, John. The Child and the Curriculum. Chicago: University of Chicago Press 1902.
- Dinkmeyer, D. Child Development: The Emerging Self. Englewood Cliffs, New Jersey: Prentice - Hall, 1965.
- Erikson, Erik H. Childhood and Society, 2nd edition. New York: W.W. Norton and Company, 1963.
- Gordon, Ira J. Studying the Child in School. New York: John Wiley and Sons, Inc. 1966.
- Navighurst, Robert J. Developmental Tasks and Education. New York: Longmans, Green, and Company, 1950.
- Rasmussen, Margaret (Ed.). Individualizing Education. Washington, D.C.: Association of Childhood International, 1964
- Skinner, B.F. Science and Human Behavior. New York: The Macmillan Company, 1953.
- Skinner, B.F. "The Science of Learning and the Art of Teaching." Harvard Educational Review, 24, 1954, 86-97.

II. Remedial Physical Education

- Abercrombie, M. L. "Visual, Perceptual, and Visuo-motor Impairment in Physically Handicapped Children: VI. Marianne Frostig Development Test of Visual Perception." Perceptual and Motor Skills. (Monograph Supplement 3) 18, 1964, 561-625.
- Andrews, Gladys. Creative Rhythmic Movement for Children. Englewood Cliffs New Jersey: Prentice - Hall, 1956.
- Conk, Robert and Simms, Marian. Perceptual Motor Activities for Young Children. Milliamsville, New York: Dodge Elementary School, 1968.
- Cruickshank, William M. Psychology of Exceptional Children and Youth. Englewood Cliffs, New Jersey: Prentice - Hall, 1963.
- Cruickshank, William M. A Teaching Method for Brain-injured and Hyperactive Children. Syracuse, New York: Syracuse University Press, 1961.
- Diem, Lisbett. Who Can? Frankfurt A.M., Germany: Wilhelm Limpert, 1967.
- Farina, Albert and Furth, Sol. H. Growth Through Play. Englewood Cliffs, New Jersey: Prentice - Hall, 1959.
- Frostig, M. "Visual Perception in the Brain-injured Child." American Journal of Orthopsychiatry, 33 (1963) 665-671.
- _____ "Education of Children with Learning Disabilities." Educating Children with Learning Disabilities. Edited by E.C. Frierson and M.B. Barbe. New York: Appleton-Century-Crofts, 1967, 387-398.
- _____ "Education for Children with Learning Disabilities." Progress in Learning Disabilities. Edited by H. Myklebust. Vol. I. New York: Grune and Stratton, 1968, 234-266.
- _____, Werne, David. The Frostig Program for the Development of Visual Perception: Teacher's Guide. Chicago: Follett, 1964.
- Hackett, Laynce C. and Jenson, Robert C. A Guide to Movement Education. Freeport, New York: Educational Activities, Inc., 1967.
- Johnson, Doris J. and Myklebust, Helmer R. Learning Disabilities: Educational Principles and Practices. New York: Grune and Stratton, 1971.
- Wepfert, Newell C. The Slow Learner in the Classroom. Columbus, Ohio: Charles E. Merrill Books, 1964.
- Ryers, Patricia and Hamill, D.D. Methods for Learning Disorders. New York: John Wiley and Sons, 1969.
- Vallett, Robert E. The Remediation of Learning Disabilities. Palo Alto, California: Fearon Publishers, Inc., 1967.

III. Interest Centers

Archambault, Reginald D., ed. John Dewey on Education, Selected Writings.
New York: Modern Library, Inc., 1964

Dewey, John. The Child and Curriculum. Chicago: University of Chicago Press, 1902

Erikson, Erik H. Childhood and Society. 2nd ed. New York: W. W. Norton and Co., 1963

Green, A. C. "Physical Setting for Self-Instructions." A. V. Media. IV (Spring 1970) 32-9.

Grossman, Ross. "Individualizing Occurs When Thinking Becomes Visible." Educational Technology. XII, 3, (August 1972) 63-64.

Hansen, D. C. "Systematic Approach to Learning Resource-Center Design." Educational Technology. XII (August 1972) 63-64.

Havighurst, Robert J., Developmental Tasks and Education. New York: Longmans, Green, and Co., 1950.

Jacobson, E. "Reading and Learning Activities Center." Education Screen. (October, 1971) 4-8.

Monroe, R. E. "Learning Center." Spectrum. 48 (January 1972) 27-33.

Soll, Lila. "Learning by Doing." Journal of Reading. XV, 7 (April 1972) 496-99.

Williams, H. "Purpose-Built Resources for Learning Center." Coventry College of Education, England. Education Broad International. V (June 1971) 115-118.

-4-

IV. The Role, Need and Function of the Paraprofessional

- Allen, Dwight W., and Morrison, Gary L. "Differentiated Staffing and the Nonprofessional: A Need for Educational Personnel Development." Journal of Research and Development in Education, 5 (Winter 1972), 51-56.
- Anderson, Wilton. "Career Development: Lattice, Recruitment, Training, and Evaluation." Journal of Research and Development in Education, 5 (Winter 1972), 3-20.
- _____. "Career Opportunity Programs: Processes and Evaluation System." Journal of Research and Development in Education, 5 (Winter 1972), 31-50.
- Bowman, Garda W. "Three Dimensional Team Training." Journal of Research and Development in Education, 5 (Winter 1972), 83-90.
- _____. "Team Training in Systematic Observation of Early Childhood Education in the Career Opportunities Program." Journal of Research and Development in Education, 5 (Winter 1972), 106-148.
- Caldwell, B. "What Is the Optimal Learning Environment for the Young Child?" American Journal of Orthopsychiatry, 37 (1967), 8-21.
- Canady, Robert, and Leyfarth, John T. "Teacher - Administrator Expectations in Defining Roles for Paraprofessionals." Education, 92 (February - March 1972), 99-104.
- Cowan, N. "The Place of the Parent." Trends in Education, (July 1966).
- Craft, M. "Developments in Interprofessional Training." Journal of Higher Education, (September 1969).
- Erb, J. "Use of Paraprofessionals." Educational Leadership, 29 (January 1972), 323-326.
- Frederberg, N.E., and Payne, D. T. "Parental Influences on Cognitive Development in Early Childhood: A Review." Child Development, 38 (March 1967).
- National Education Association. Research Division. "Helping Teachers with Teacher Aides." National Education Association Research Bulletin, 50 (May 1972), 60-63.
- Pope, L. "Blueprint for a Successful Paraprofessional Tutorial Program." Neuro Education Research, 22 (April 1971), 100-113.
- Rauch, S.J. "Using Paraprofessionals as Reading Aids." International Reading Association Conference Papers (Reading Methods and Teacher Improvement), 15 (1971), 104-108.
- Smith, N. C. "Utilization of Volunteer Aides in a Helping Relationship with Children." Journal of School Psychology, 8 (1970), 202-208.
- Wolman, T., and Levinson, D. "Parent - School Partnership in Pre-Kindergarten." Teachers College Record, 69 (1968), 421-431.
- Wolotsky, Hyman and others. "The Paraprofessional in the Role of Adult Learner." Journal of Research and Development in Education, 5 (Winter 1972), 101-105.

-5-

V. Individualized Instruction

Allen, D. W. "How You Can Individualize Instruction Right Now." Nation's Schools, April, 1966.

ASCD Year Book, "Individualizing Instruction," National Education Association, 1964.

Audio-visual Instruction. "Self instruction and Information Retrieval Systems; Symposium," 4 (Spring 1970), 6-39.

Auxter, D. "Teacher of Individually Prescribed Instruction in Perceptual Motor Development." JOMPER, 42 (June 1971), 41-42.

Bartel, E. V. "Initiating a Self-directed Learning Program in the Classroom." Education, 91 (February 1971), 247-249.

Bishop, Lloyd K. Individualizing Educational Systems. New York: Harper and Row, 1971.

Bloom, Benjamin S. (Ed.). Taxonomy of Educational Objectives: Handbook I: Cognitive Domain. New York: McKay, 1956.

Burns, R. "Methods for Individualizing Instruction." Educational Technology, 11 (June 1971), 55-56.

Childhood Education. "Designing Tomorrow's Schools Today: The Multi-Sensory Experience Center," February 1971.

A Climate for Individuality. Statement of the Joint Project on the Individual and the School. Washington, D. C.: American Association of School Administrators, 1965.

Clymer, T., and Kearney, N. C. "Curricular Instructional Provisions for Individual Differences." Individualizing Instruction. Edited by N. B. Henry. Sixty-first Yearbook (Part I) of the National Society for the Study of Education. Chicago: University of Chicago, 1966.

Combs, Arthur, and Snygg, Donald. Individual Behavior. New York: Harper and Row, 1964.

Cutts, Norma and Mosely, Nicholas. Providing for Individual Differences in the Elementary School. New Jersey: Prentice-Hall, 1960.

Doll, R. (Ed.). Individualizing Instruction. Washington, D. C.: Association for Supervision and Curriculum Development, 1964.

Drumheller, S. J. "Transitional Support System for the 1970's: Developing Individualized Instructional Programs." Educational Technology, 11 (October 1971), 34.

- Dunn, R. S. and Dunn, K. "Practical Questions Teachers Ask About Individualizing Instruction, and Some of the Answers." Audio-visual Instructor, 17 (January 1972), 47-50.
- Eisele, J. E. "Individualized Instruction." Contemporary Education, 43 (October 1971), 16-20.
- Eiss, A. F. "Individualized Learning." Science and Children, 9 (April 1972), 9-11.
- Ericks, J. A. "Evaluation Model for Mastery Testing." Journal of Educational Methods, 8 (Winter 1971), 321-326.
- Flammer, Gordon H. "Learning as the Constant and Time as the Variable." Journal of Engineering Education, 61 (March 1971), 523-527.
- Gibbons, Maurice. "Systematic Development in Schooling." The Journal of Education, 16. (April 1970), 32-43.
- Gleason, Gerald T. (Ed.). The Theory and Nature of Independent Learning. Scranton: International Textbook, 1967.
- Grossman, Rose. "Individualizing Occurs When Thinking Becomes Visible." Education Technology, 12 (March 72), 36-39.
- Henry, Nelson B. (Ed.). The Dynamics of Instructional Groups. Fifty-ninth Yearbook (Part 2) of the National Society for the Study of Education. Chicago: University of Chicago Press, 1960.
- _____. (Ed.). Individualizing Instruction. Eighty-first Yearbook (Part I) of the National Society for the Study of Education. Chicago: University Press, 1962.
- Hensley, C. "Individualized Instruction; Purposes and Organization." School and Community, 58 (October 1971), 32-33.
- Howes, Virgil M. Individualizing of Instruction. New York: Macmillan, 1970.
- Jablonsky, Adelaide. "A Selected Eric Bibliography on Individualizing Instruction." New York: Eric Information Retrieval Center on the Disadvantaged, Teachers College, Columbia University, January 1969.
- Jasik, Marilyn. "Breaking Barriers by Individualizing." Childhood Education, October 1968.
- Kepfer, Philip G. "An Instructional Management Strategy for Individualized Learning." Phi Delta Kappan, 49 (January 1968), 260-263.
- Kepfer, P. G., and Kepfer, M. B. (Eds.). "Learning Packages; Symposium." Educational Technology, 12 (Summer 1972), 9-65.
- Kingstodt, J. L. "Developing Instructional Modules for Individualized Learning." Education Technology, 11 (October 1971), 73-74.

- Klausmeier, H. J. "Multi-unit Elementary School and Individually Guided Education." Phi Delta Kappan, 53 (November 1971), 181-184.
- Klausmeier, H. J. and Others. "Instructional Programming for the Individual Pupil in the Multiunit Elementary School." Elementary School Journal, 72 (November 1971), 88-101.
- Lambek, M., and Lorentzen, M. "Learning Resource Centers in Every Classroom." Instructor, October 1971, 81-88.
- National Society for the Study of Education. Individualizing Instruction. Chicago: University of Chicago Press, 1961.
- New Approaches to Individualizing Instruction. Princeton: Educational Testing Service, 1965.
- Newhouse, Robert A. "Classroom Learning Stations----A Strategy for Personalized Instruction." Research Bulletin, 17 (Winter 1972), 38-39.
- Noar, Gertrude. Individualized Instruction: Every Child a Winner. New York: Holt, Rinehart and Winston, 1971.
- Packard, R. G. "Models of Individualized Instruction: The Search for a Measure." Educational Technology, 12 (August 1972), 11-14.
- Palmer, C., and Kent, S. "Helping Parents Understand the Flexible Classroom." Indiana School Bulletin, 31 (October 1971), 35-37.
- Peter, Lawrence. Prescriptive Teaching. New York: McGraw-Hill, 1965.
- Root, Gus. "Designing Institution Achievement Motivation." Journal of Engineering Education, 61 (March 1971), 523-527.
- Roth, T. C. "Expanding the Concept of Individualized Education." Education Forum, November 1971, 61-66.
- Snapp, M. and Others. "Study of Individualizing Instruction by Using Elementary School Children as Tutors." Journal School Psychology, 10 (March 1972), 4-5+.
- Stodghill, R. "Toward New Goals for Individualization: Symposium." Educational Leadership, January 1972, 295-296+.
- Tanner, Laurel N., and Lindgren, H. C. Classroom Teaching and Learning. New York: Harper and Row, 1971.
- Thomas, G., and Crescimbeni, J. Individualizing Instruction in the Elementary School. New York: Random House, 1967.
- Thomas, R. M., and Thomas, Shirley M. Individual Differences in the Classroom. New York: McKay, 1965.

Torrance, Paul E. "Independent Study as an Instructional Tool." Theory into Practice, December 1966.

Veatch, Jeanette. "Improving Independent Study." Childhood Education, January 1967.

Wheeler, A. H. "Creating a Climate for Individualizing Instruction." Young Children, 27 (October 1971), 12-16.

Winn, Mildred. "Independent Study at Seven." Childhood Education, 1970.

Wolfson, B. J. "Pupils' and Teachers' Roles in Individualized Instruction." Elementary School Journal, April 1968.

Subject Areas

Social Studies

Campbell, R. H. "Individualization Through Inquiry: Social Studies as the Vehicle." Gifted Child Quarterly, Autumn 1971, 225-228.

Kenworthy, Leonard S. Social Studies for the Seventies. New York: Ginn, 1970.

Jarolimek, John and Davis, B. Social Studies: Focus on Active Learning. New York: Macmillan, 1970.

Taba, Hilda; Durkin, M.; and Fraenkel, J. R. Teachers Handbook for Elementary Social Studies, 2nd edition, Massachusetts: Addison-Wesley, 1971.

Science

Klopfer, L. E. "Individualized Science: Relevance for the 1970's." Science Education, October 1971, 441-448.

Renner, J. W.; and Ragan, W. B. Teaching Science in the Elementary School. New York: Harper and Row, 1968.

Schmidt, V. E.; and Rockcastle, N. Teaching Science with Everyday Things. New York: McGraw-Hill, 1968.

Victor, Edward. Science for the Elementary School. New York: Macmillan, 1970.

Reading

Chall, Jeanne. Learning to Read: The Great Debate. New York: McGraw-Hill, 1967.

Cohen, S. Alan. Teach Them All to Read. New York: Random House, 1970.

Reading

Harris, Albert J. How to Increase Reading Ability. 5th edition. New York: David McKay, 1970.

Lee, Doris M. Learning to Read Through Experience. 2nd edition. New York: R. Vallen, 1969.

Schoeller, A. W. "Setting Up Reading Stations." Instructor, April 1972, 57-59.

Trimble, Nan. "Reading Tailored To Fit." Reading, 5 (June 1971), 10-14.

Mathematics

Clark, H. C. "Before You Individualize Your Elementary Math." School Science and Mathematics, 71 (November 1971), 676-680.

Davis, R. B. "Individualizing Mathematics Instruction: Symposium." Educational Technology, 12 (March 1972), 5-59.

Trueblood, C. R. "Model for Using Diagnosis in Individualizing Mathematics Instruction in the Elementary School Classroom." Arithmetic Teacher, November 1971, 505-511.

VI. Early Intervention----Rationals

- Alma, M. Young Children's Thinking: Some Aspects of Piaget's Theory. New York: Teachers College Press, Columbia University, 1966.
- Anderson, Robert H.; and Shane, Harold G. Early Childhood Education: Implications of Early Childhood Education for Lifelong Learning. Washington, D.C.: National Society for the Study of Education Yearbook, n71pt, 1972, 367-390.
- Coleman, J.S., et al. Equality of Educational Opportunity. Washington, D.C.: Government Printing Office, 1966.
- Fowler, William. "Cognitive Learning in Infancy and Early Childhood." Psychological Bulletin, 59 (1962), 116-152.
- Cesell, Arnold, and Ilg, Francis B. The Child from Five to Ten. New York: Harper Brothers, 1946.
- Gordon, Ira. "The Beginnings of the Self: The Problems of the Nurturing Environment." Phi Delta Kappan, 1(1965), 375-378.
- Guinagh, Barry J. "Needed: A Theoretical Rationale Symposium." Symposium on Issues in the Intellectual Evaluation of the Pre-Schooler. New York: American Educational Research Association, February 1971.
- Hunt, J. McV. Intelligence and Experience. New York: Ronald Press, 1961.
- Inhelder, Barbel, and Piaget, J. The Early Growth of Logic in the Child. New York: Harper and Row, 1964.
- Jester, Emile R. "Intellectual Stimulation of the Preschooler and its Implications in the Development of Reading Skills." 20th Annual Reading Conference. Bethlehem, Pennsylvania: Lehigh University, March 27, 1971.
- Johnson, Charles. Intensified Preschool Training and Follow Through. (Research and Development in Educational Stimulation) Georgia: University of Georgia, 1970.
- Moore, Omar K., and Anderson, Alan R. Early Reading and Writing, Part I: Skills (motion picture). Guilford, Connecticut: Basic Education, Inc., 1960.
- Early Reading and Writing, Part II: Thinking Methods (motion picture). Guilford, Connecticut: Basic Education, Inc., 1960.
- Early Reading and Writing, Part III: Development. Guilford, Connecticut: Basic Education, Inc., 1960.
- Percy, C.H. "Early Schooling: A National Commitment." American Association School Administration Report 1957. Washington, D.C.: National Society for the Study of Education Yearbook, 1972, 64-75.

VI. (continued)

Piaget, Jean. The Origin of Intelligence in Children. New York: Norton Library, 1962.

Schaefer, E.S. "Converging Conceptual Models for Maternal Behavior and for Child Behavior." Parental Attitudes and Child Behavior. Edited by J. Glidewell. Springfield, Illinois: Charles C. Thomas,

Scott, J.P. "Critical Periods in Behavioral Development." Science, 1962, 138, #3544.

Siegel, B. and Wass, H. Psychology of Early Childhood: A Book of Readings. New York: MSS Educational Publishing Company, Inc., 1970.

Sigel, I.S. "The Attainment of Concepts." Child Development Research. Edited by M.L. Hoffman and L.W. Hoffman. New York: Russell Sage Foundation, 1964.

Smilansky, S. "Progress Report on a Program to Demonstrate Ways of Using a Year of Kindergarten to Promote Cognitive Abilities." Israel: Henrietta Szold Institute, 1964.

Wann, Kenneth D.; Dorn, Mariam S.; and Liddle, Elizabeth A. Fostering Intellectual Development in Young Children. New York: Bureau of Publications, Teachers College, Columbia University, 1962.

Young Children. "Developmental Theory: Its Place and Relevance in Early Intervention Programs," 27, August 1972, 364-372.

VII, Public Documents

The Chenango American and Whitney Point Reporter(Greene, New York), January 19, 197

U.S. Department of Health, Education and Welfare. Guidelines: Special Programs
for Educationally Deprived Children. Washington, D.C.: Government Printing
Office, 1970.