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ABSTRACT

Individualized reading and mathematics programs in the United States and Canada were surveyed as a means of providing a report of successful programs for use by the Calgary, Alberta, schools. The report contains definitions of terms related to individualized programs, statements of rationale for individualized reading and mathematics programs, guidelines for individualizing instruction, and descriptions of existing programs. Aspects of individualized programs are described, and approaches for use in such programs are recommended. Individualized instruction is strongly recommended, and a comprehensive plan is proposed through which transition might be smoothly made from the present basal system to individualized instruction. A list of schools and centers visited and an extensive bibliography are included. (MS)
A SURVEY OF INDIVIDUALIZED
READING AND MATHEMATICS
PROGRAMS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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A HANDBOOK TO INDIVIDUALIZE READING— which has been developed for use in schools is closely related to this study - available on request}

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CHAPTER I

THE PURPOSE OF THE STUDY

The purpose of this study has been to survey Individualized Programs in reading and mathematics currently operating in American and Canadian classrooms and report on findings to members of the combined Calgary Separate School Board and Alberta Teachers' Association Research Committee.

Reading and Mathematics provide the basic tools required in other subject areas. Reading in particular appears to be the key to success in Individualized Programs and it may also be the one essential ingredient to continuing one's education throughout life.

My survey in person took me across Canada, south of Miami, Florida, northeast of New York, across to Chicago, Illinois, westward to Tempe, Arizona, and west to Los Angeles. I met and visited with leading educators who are at present involved in Individualized Programs and had the opportunity to see Individualized Programs in operation.

I owe a debt of gratitude to the Calgary Separate School Board and Alberta Teachers' Association Research Committee for giving me
the opportunity to observe and record my experiences and impressions. Especially, I wish to express my sincere thanks to Dr. Veatch, Dr. and Mrs. Spache, Dr. Goodlad and Dr. Franseyth who made the necessary arrangements to visit schools and enable me to obtain valuable information for my study.

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CHAPTER II

DEFINITION OF SOME TERMS

The following are the definitions of some terms as used in this report.

**Individual conference:**
Throughout the report of this survey, the term, "Individual conference" shall be interpreted as meaning a one-to-one interview in an individualized program between teacher and pupil, during which a personal contact with the study is made; special needs are met, an individual diagnosis is made by the teacher; individualized instruction is given; and pupil records are updated.

**Instructional objective:**
This term refers to a statement that describes an intended outcome of instruction.

**Cross grouping:**
The writer has used this term to refer to a particular kind of grouping in which either the total school population or a particular division is tested, and reading results tabulated. From these results students are assigned to particular reading group level. The group remains intact for a set period of time during which necessary instruction is given to master the skills on the particular level.
**Stratified grouping:**

Stratified grouping was interpreted as meaning a particular kind of grouping in which a number of classes of the same grade level are tested, and students are grouped according to grade levels. Then, two very distinct diverse groups are assigned to a classroom.

**Contract:**

The writer has used this term to refer to a type of written agreement between teacher and student in an individualized program which enables the student to develop more self-direction and self-selection. In a contract, the student writes down all the learning activities he will engage in during a set period of time.

**Charisma:**

This term is used in reference to the quality possessed by an individual, i.e., administrator, who is able to bring about changes or stability based largely upon his personality.

**Professionalism:**

This term is used in reference to the independent activity of an educator, i.e., teacher, in implementing, adopting, inventing or researching new or better ways of teaching and learning at the individual school or classroom level.

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CHAPTER III

WHY INDIVIDUALIZE INSTRUCTION?

Individualizing Instruction is not a new concept. As early as 1900 the Dalton Plan or Contract Plan endeavoured to have students work individually in basic subjects, work cooperatively in labs and learn to use their time wisely. Also, the Winnetka Plan of 1913-1920 endeavoured to individualize instruction by implementing a continuous progress school with no grades. However, since standards or norms were set and mastery of subject material was the important thing, children were not viewed as individuals. Educators have seen numerous structures such as departmentalization, multi-grades and dual progress. Each has endeavoured to meet individual needs.

Many educators have been concerned about trends in Individualizing Instruction. A seminar on the provocative topic of "How to Enhance Individuality in Learning" was held at Ditchley Park, Oxfordshire, England, in late 1967. Co-sponsors were the National Association of Secondary School Principals and the Institute for Development of Educational Activities. The purpose of this seminar was to provide a basis for examining the more universal and energetic approaches to individualized learning. During this seminar some conferees expressed the following:
a. School administrators can establish an atmosphere as well as an organizational pattern which will induce staff and students to grow as individuals; however, it is the classroom teacher who will determine whether individuality is respected.

b. There was a basic agreement on the conclusion that individuality in learning will be increased when teachers recognize that any grouping of students is still a combination of attitudes.

c. Conferees were in accord that when students of varying achievement are removed from some classes and placed in special classes in particular subject matter all students benefit. New leadership emerges in slower classes when students begin to look at themselves rather than to brighter students for answers. Bright students are stimulated to explore more challenging interests.

d. On the topic of conformity, the conferees unanimously agreed that parents advocate conformity of the worst kind. They, the parents, largely want children who can pass the tests.

During the writer's survey, it became evident that many administrators are providing the charisma to organizing patterns for individualization. One of the best examples was witnessed at Nova schools, Fort Lauderdale, Florida, where Individualized Instruction
was a commitment. Here, the administrator worked closely with teams of teachers who are continually developing new materials. In many instances, the administrator supplied the charisma, but teachers were reluctant to change. At North Palm Springs Elementary School, Hialeah, Florida, two teams of teachers were involved in the Individualizing of Instruction for approximately two hundred students while the rest of the school population followed the traditional graded system.

If we believe in individual differences then educators must view pupils as unique individuals. Doris Lee, Professor of Education, maintains that we must put into practice what we really know and believe about learning; i.e., children learn from living, children differ in many ways, the school has an obligation to children, and learning conditions determine effectiveness of learning. An example is that of Sylvia-Ashton Warner who gave the education world a simple, but powerful introduction to beginning steps in reading. She maintains that learning should be a living experience. When teaching the Maori in New Zealand, she capitalized on environmental experiences. Instead of using commercially prepared materials, she used the children's vocabulary as a base from which she was able to broaden their vocabulary.

During the past years, Dr. Veatch has made a tremendous impact

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on American Schools in the individualization of reading. Using Key Vocabulary - Children's Literary Books, children are taught to read in a method similar to that of Sylvia-Ashton Warner. Key Vocabulary simply means "Key" words children use in everyday speech and it is the teacher who capitalizes on these "Key Words" in the instruction of writing and reading of original children's stories. Only after they are able to read their own stories do they begin reading literary/library books. What a great advantage these children have to select literature to enhance previous life experiences and enable them to have numerous vicarious experiences which are necessary to a child's total development.

Although this program was never seen operating on a large scale, the writer had the opportunity of visiting classrooms in Florida, New Jersey, Illinois and Arizona which at present were involved in the above program. Teachers interviewed indicated that their role had undergone some startling changes, in that, they became a guide rather than a lecturer. The more demanding role of a diagnostician was felt by all teachers. Dr. Weiss, New Jersey State College, has advanced this idea of individualization of reading by strongly advocating the teaching of reading skills in all subject/content areas when the need is evident.

One of the guest speakers at the reading conference in October, 1969, at Daytona Beach, was Dr. Durkin, Professor at the University
of Illinois, who informed the audience that children in numerous Illinois schools were being taught to read from their ordinary surroundings, i.e., use of television commercials, cereal labels, and newspaper advertisements. She emphasized that one can capitalize on environmental factors to teach words. Such words are readily identified by the child and, hence, reading can become a very personal experience.

At the Ditchley Conference, the topic of curriculum generated the most animated discussion of all. Conferees indicated that for many years very little attention had been paid to the individual. Both university scholars and curriculum innovators had given emphasis to subject matter rather than individualization. Conferees agreed that today many of the scholars engaged in curriculum development are stressing the structure of the subject and concept rather than memorization. Others are designing games in order to make learning more attractive.

In most areas of the elementary curriculum, some educators believe that readiness for specific learnings is primarily a function of the curriculum and not a function of the child's growth. They suggest that almost any concept or topic can be taught at any grade level provided that it is conveyed in terms appropriate to the child's level of understanding and that instruction is paced in
accord with his attention span and comprehension level. The trend seems more to explore the instructional possibilities.

Mathematics Programs have undergone numerous changes within the last few years. Concepts formerly introduced in later Elementary years now appear in earlier Elementary school years. Also, in addition to earlier introductions to concepts, teachers are beginning to individualize their programs.

Broward Country, Miami, Florida, has developed a series of Sami Probes (Systematic Approach to Mathematical Instruction), from which children are programmed into various texts which explain the particular concept. Here, children have the opportunity of selecting which text or mathematics games they will use at any given time. Possibly the most widely known approaches to Individualized Instruction is that of Individually Prescribed Instruction, developed by Drs. Glasser, Bolvin, and Lindvall at the University of Pittsburg. In this program children are presented with tests and from results are prescribed worksheets. Possibly one of the strongest features of I.P.I. is that of self-pacing.

In many instances, common everyday media (that which children are exposed to in the environment) was capitalized upon and became part of the learning program. During the writer's visit to North Palm Springs Elementary School, Hialeah, Florida, teachers capital-

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ized on comic strips from the local paper to facilitate the teaching of quotation marks, teaching of sequence, and writing a creative story. It became obvious that there was unlimited possibilities for using any particular section of the daily paper to teach reading and language.

Frequently in new curriculum designs almost any topic may appear at any grade level, but the complexities of understandings developed, the time allotted, and specific learning activities employed vary in accordance with the general learning characteristics of the children at each level. At times no definite program in Social Studies or Science was obvious to the writer or even listed on a timetable in the school.

Teachers at Highland Oaks Elementary School, Miami, Florida, were guided by a simple outline of concepts which were to be covered. Here the total teaching force from grades four to six endeavoured not to teach concepts as separate entities or subjects, but rather endeavoured to correlate Social Studies and Science concepts in the total Language Arts Program.

New curriculum emphasized the importance of teaching children how to think about concepts that are presented, and how to think about their application in other learning areas; therefore, the teaching goal would be to enable students to develop the competencies needed to learn on their own in a self-directed manner. It
has become increasingly obvious that Interest Centers or Learning Stations, as seen in schools in Virginia and Maryland, have a vital role in individualized programs. At particular centers a child is able to self-select materials which have been developed by the teacher to meet the needs of her class, and pursue the solving of problems in a way best suited to meet his needs.

With the variety of workbooks at present available to educators, all commercially prepared materials for students can and do play a vital role in individualizing instruction. Since the learning of skills varies with the child and his needs, the teaching skills in an individualized program requires readily available material for teachers which are found not in one workbook, but rather in various available materials. Under the supervision of Dr. and Mrs. Spache, teachers in the Jacksonville area have constructed skill kits which are a compilation of various workbook sheets covering all the skills required in a reading program. Teachers with skill kits are able to teach, and, later, prescribe exercises to reinforce a particular skill required by the pupil.

Evaluation has become one of the major problems for educators when individualization of instruction is attempted. Most educators felt that a special type of report card must be constructed which would be suitable to report pupil progress on the basis of the individual student.
In the majority of classrooms cognitive achievement is regarded as normal for grading purposes. During the school year examinations which may include a great range of cognitive objectives are administered to which teachers have little hesitation in giving a student a grade A or E on the basis of his performance.

In contrast, in an individualized classroom the gradings of A or E disappear. Both cognitive objectives and affective objectives become the basis of evaluation. The former, is measured in relation to the student's achievement according to his ability, while the latter affective objectives such as interests, attitudes, and character development is measured in relation to how he, the student, functions in the total educational environment.

Nova Schools, Fort Lauderdale, Florida, Richenback Laboratory School, Kutztown College, Kutztown, Pennsylvania, and numerous other schools visited by the writer had decided that in order to successfully evaluate both cognitive objectives and affective objectives in their individualized program they had to construct their own report card for their school rather than adopt the county/state report card. In addition, rather than sending home report cards for the four respective reporting sessions, it was decided to have two parent-teacher conferences and two report cards be sent home. During the conferences with the parents, teachers informed parents

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of their child's progress; moreover, they presented constructive assistance to aid the child's progress. At Nova Schools, Fort Lauderdale, Florida, in addition to the teacher's presence at the conference, it was felt that the presence of guidance personnel further assisted in evaluation.

Teachers interviewed were in favor of this type of evaluation and indicated that parents were pleased with this type of reporting in the sense that their child was evaluated on his own merits rather than compared to a norm. During the past few years John M. Fossett\(^4\) surveyed teachers, citizens, and teachers in regard to numerous aspects of education including that of evaluation. His results were similar to those presented to the writer during the interviews at numerous schools.

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CHAPTER IV

WHAT IS MEANT BY INDIVIDUALIZING READING AND MATHEMATIC INSTRUCTION?

Individualizing instruction is focusing upon a child's performance, this means the child's total performance in an educational environment. Curriculum, evaluation, teacher-role, and pupil-role seem to undergo a change.

Doris Lee,5 Professor of Education at Portland College of Education, places her finger on the role change of the teacher when she says,

Teachers must take themselves off the stage; must stop making assignments; and must stop correcting papers.

How can we tell if our behavior and that of the student's is geared to individualized learning? What particular manifestations of teachers and pupils appear in an individualized learning situation? Danowski has identified criterion that describes individualizing behavior. Individualizing teachers will manifest the following;

1. pursue multiple objectives,
2. plan and prepare in terms of individuals,

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3. communicate with individuals while others are busy,
4. use immediate and delayed feedback to modify the message,
5. observe and record individual growth not lack of it,
6. evaluate each student on his own growth and development and communicate this to the parents by conference.

Individualizing students are identified in similar ways.

They will;

1. pursue objectives which they themselves have established or help to establish,
2. plan and prepare uniquely through independent work, study, practice or demonstration,
3. engage in small group activity in which discussion is considered a function of learning and the teacher is noticeable by her silence,
4. manifest originality, creative productivity, and purposeful divergence,
5. actively participate in learning activities,
6. evaluate their growth and development.

From the writer's personal experiences an elaboration of each of Danowski's statements in relation to what is actually happening in individualized reading and mathematics programs in Canadian and U.S.A. schools will be made.
1. "Objectives"

Teachers and pupils must be aware of the daily learning expectations in an individualized reading and mathematics program. Each day teachers are faced with the problem of numerous groups and individuals whose needs must be met. Teachers must decide which individuals or groups are to receive instruction and in what ways their needs may be met. Students in an individualized program are faced with the problem of deciding what specific learnings are to be obtained from a particular learning situation. Therefore, an awareness of learning expectations exist between pupils and teacher. The writer visited a number of schools where definite signs of such interaction was evident. At Thomas Jefferson Junior High, Miami, Florida, teachers were in the process of writing objectives, preparing programs, and informing students of the available material from which students could choose to reach the objective.

Learning Laps, program learning with definite objectives, have been part of Nova Schools, Fort Lauderdale, Florida, for a number of years. Here teams of teachers spend a portion of the day studying pupil needs and preparing laps to suit a particular learning situation. At North Palm Springs Elementary School, Hialeah, Florida, teachers prepare specific objectives daily for both individual students and small groups of students which are
then presented to the student body at the beginning of the day. With their written objectives in mind, students use various available materials to accomplish objectives.

In not too many instances did the writer observe students actually writing objectives. Possibly students at Welsh Demonstration School, Rockford, Illinois, demonstrated a type of writing objectives when individual students requested conferences and, in addition, listed particular skills which they felt that they required in reading.

2. "Planning and Preparation"

Individualized programs require a teacher to plan in terms of individuals who comprise a student body rather than in terms of a single student body. Schools such as Emerson School, Miami, Florida, Reckenback Laboratory School, Kutztown, Pennsylvania, Midland Park, New Jersey, Cauldwell, Springfield, New Jersey, and schools in the Chandler Arizona area which are at present involved in Dr. Veatch's Individualized Reading Program exemplify the extensive planning and preparation which occurs within the confines of a classroom engaged in an individualized reading program.

Every aspect of this reading program, i.e., pupil-teacher conference, skill teaching, grouping, requires a great amount of preparation and planning by the teacher. Even before the program is initiated, a teacher must be aware of the reading levels and
interests of her class, must inform parents, and, also, inform the students of the expectations of the program.

Skill teaching is not ignored in an individualized reading program. In fact, skills are taught to individual students, a group of students, or to the total student body whenever it becomes necessary to achieve success in the total reading program.

At Emerson Elementary School, Miami, Florida, the teacher had constructed a Master Chart on which was listed certain skills each child should know. From conferences, assignments, and diagnostic tests, names of pupils who were having difficulties in the respective skill areas were listed. From this information, the teacher was able to teach to individual students, groups of students or the total class.

At times it becomes difficult to prepare suitable assignments for students; whereas, commercially prepared material can become part of an individualized program at once. Under the direction of Dr. and Mrs. Spache, Jacksonville, Florida, teachers have constructed skill kits into which they have filed various commercially prepared i.e., workbook materials and from which they are able to prescribe exercise to students whenever the need arises.

A vital focal point of Dr. Veatch's individualized program is the conference. In the majority of conferences, the student and teacher meet and discuss particular aspects of reading. It
is during this time that the student is taught on a one to one basis, assignments are prescribed, and a teacher is able to obtain additional information with regard to further planning for individuals in her class.

Sami, an individualized mathematics program widely used in Broward County, Florida, provides teachers with a number of probes tests from which the teacher is able to diagnose individual difficulties and prescribe individual students into a number of mathematic texts and materials. From this array of materials, a student independently self-selects materials to enable him to pursue a particular concept or skill in mathematics. One of the most widely known programs is that of Individually Prescribed Instruction. At Individually Prescribed Instruction Schools, Richland School, Quakertown, Pennsylvania, and Washington School, Trenton, New Jersey, visited by the writer, teachers assumed the role of diagnostician and from results of commercially I.P.I. prepared pretests prescribed students to work certain problems in I.P.I. mathematic workbooks. It was observed that in the majority of instances students worked independently during the entire period.

The writer was able to observe definite signs of actual planning done by the students. Students at a number of schools wrote a contract (a list of reading activities), which were to be completed in the reading period. At North Palm Springs Elementary
School, Hileah, Florida, and Dewson School, Toronto, Ontario, the first ten minutes of the school day was set aside to give students the opportunity to write a contract for the entire school day. Students listed specific concepts to learn, materials they were to use, and subjects to be covered during the school day.

3. "Communication - Direction"

The climate of the individualized classroom is one of great activity. The absence of complete silence is most evident. Instruction in the classroom may take one of the following patterns:

a. individual conference where instruction is on a one-to-one pupil-teacher basis,

b. small group instruction where a number of students are grouped because of a particular need, i.e., skill or interest in discussing a similar topic, or

c. large group instruction where the total student body receives instruction.

Hence, when the teacher is engaged in either an individual conference or small group instruction, the rest of the student body is engaged in numerous learning activities.

The writer has observed throughout North America varied learning activities where students have actively pursued knowledge without deliberate teacher direction or supervision. Interest Centers (independent learning areas planned by the teachers) as seen by the
writer in many schools in Maryland and Virginia, become areas where students have engaged in lively discussion or have worked independently. Frequently a learning situation has arisen on the spur of the moment when a group of students have gathered to discuss a particular project or have shared and discussed particular books.

In numerous classes students have paired together to read orally in preparation for reading to the entire class or to the teacher. Students have felt free to request assistance from more able students when confronted with a particular learning problem they were not able to solve by themselves. Teachers interviewed indicated that it appears that students have retained more information where they accepted some of the responsibility for learning.

4. "Communication - Message"

Students in an individualized program are not faced with the dilemma of competing to meet an "average" mark or "bench" mark. During the writer's interview with Dr. Franseyth, Department of Health and Welfare, Washington, D.C., Dr. Franseyth stated that possibly one of the most advantageous aspects of an individualized program is that of building within the student a more positive perception of self. Dr. Franseyth made reference to Art Comb's study which gives evidence that learning is closely related to the changing perception of self.
If the student sees himself as a person who can succeed, more positive learning will likely take place. With a more positive concept of self, the student will feel freer to be original and creative in the learning situation. Possibly the built-in motivation and positive reinforcement, concomitants of individualized instruction, encourage pupils to pursue greater enjoyment in learning.

In the majority of individualized reading programs observed by the writer, evidence of student originality and creativity was very apparent. Activities such as "Be an Author", a collection of pupils original poems and stories, observed at Meyanoke School, Fairfax County, Virginia, gave latitude to student expression.

At Midland Park School, Midland, New Jersey, at present under the consultantship of Dr. Weiss, Professor, New Jersey State College, Jersey City, New Jersey, reading has become the core of the entire school program. Students are given a particular topic, i.e., War.

Using such a topic, groups of students are formed each considering a different aspect, i.e. Science, Social Studies, Language, Arts, etc. After the research has been completed, the respective groups meet, present the information in whatever manner selected by the students, and, therefore, a sharing of information takes place. From this learning situation the teacher is able to observe both individual behavior of pupils and obtain feedback information of previous learnings.
Students in the Chandler School System who were at present involved in Dr. Veatch's Key Vocabulary Children's Literary Books became authors of their own reading material. Using words previously presented to the teacher, students told a story or a group of sentences to the teacher who printed the words for the student. This became the basis of the student's beginning reading program.

At times students grouped to dramatize either their original stories or stories read. These dramatizations were taped to be shared with the rest of the student body.

Students often paired to become an illustrator and author team. Later, the story became available for the entire student body to enjoy. In a number of schools the upper elementary grades rewrote books they had read for the younger students in the school.

North Palm Springs Elementary School, Hileah, Florida, was making excellent use of cartoons and comic strips to enable students to demonstrate their originality and creativity in that they wrote original captions which they later shared with fellow students.

5. "Function"

A teacher's role in an individualized program is not primarily as a purveyor of information. According to Doris Lee, the teacher must be able,
To involve the student intimately in problem solving; guide the growing edge of the individual's learning; establish purposes for learning where none may be obvious; and develop self-directed learning through self-evaluation. The writer observed that teachers functioned as diagnosticians encouraged the students to learn for extrinsic motives, and guided students to engage in purposeful independent activities.

The most important aspect of an individualized program is the conference. A record of each individual conference is kept by the teacher during the actual conference and after the conference. The writer observed that in this intimate teaching situation the teacher noted particular student weaknesses, taught skills and concepts, noted the students' attitude towards the learning material, positively reinforced the student on his learning, and prescribed follow up exercises whenever necessary. Such information became the basis for the teacher's future actions with her class.

Students in an individualized program are active participants in learning activities. Each student keeps an individual record of his activities noting what he will hope to accomplish during a set given time allotment. In many instances students were given a number of choices of pre-selected activities or students accepted the responsibility of independently selecting activities. Activities selected covered a wide spectrum which could include peer group teaching, project activities, sharing in learning activities, being the teacher's helper, team work, co-operatively working with another
During the writer's interview with Dr. Botell, University of Pennsylvania, Philadelphia, Pa., Dr. Botell stressed the fact that there is great value in children working together. In addition, Dr. Botell maintained that oral language is the greatest builder of intellect. Learning how to say things is important and learning how others say things is equally important. This can happen and does happen when children become active participants in learning.

6. "Evaluation"

Traditionally evaluation of a student's progress has taken the format of a graded report based on the results of commercially prepared and teacher prepared tests the results of which are shared with parents quarterly. Using this type of evaluative procedure, a student's evaluation is measured in relation to his achievement with other members in the student body.

Teachers involved in individualized programs accept the task of evaluating each student's progress on his individual growth and development in the learning environment. Therefore comprehensive individual records play a vital part in assisting the teacher to evaluate the student. Each record contains data which may reveal the students' progress and achievement at particular learning tasks. These records give focus to teaching and learning. And, a new data is accumulated, both student and
teacher are able to note gains, make new plans, change directions, and, in general, do those things which sustain progress already made and serve as undergirding for new understandings.

Increasing self-evaluation on the part of the student is one of the greatest contributing factors to success in working with children. It is the essential key that frees students to become aware of their own needs and able to move ahead to satisfy them.

Doris Lee feels that children require some assistance in making accurate evaluations; however, this help should come after the child has made his evaluation and, then, only if it seems adequate. In addition Lee maintains that,

Self-evaluation is the basis for self-direction. As one knows where he is and has established a purpose, he can easily and surely move toward it, a purpose that a child sees and has commitment for is far more important and will produce far more success.

In many schools visited by the writer, students accepted the responsibility of their own weekly evaluation. For instance, students at Emerson Elementary School, Miami, Florida, filled out a weekly evaluation sheet on which they listed all activities completed and made definite indication if assistance was required.

Instead of the graded report card, schools involved in individualized programs had adopted a written progress report card. The quarterly reporting schedule had been retained but they decided to

7Ibid, p. 23.
have two report cards which were sent to the parents, and two parent-teacher interviews/conferences would be held. Prior to the teacher-parent conference, the teacher prepared a list of items she intended to discuss with the parents.

During the conference these items were discussed and concrete suggestions which would assist the pupil's learning were given to the parents.

A new approach to reporting was experimented by Dewson School, Toronto, Ontario. During an interview with the principal, the writer was informed that three parent-teacher conferences are scheduled in the school year. At the end of the year, the student was given a written report indicating his yearly progress.
CHAPTER V

HOW TO INDIVIDUALIZE INSTRUCTION

Individualizing instruction is a method of teaching designed to meet the individual needs of students within a single classroom. In the majority of schools visited by the writer, individualized instruction was not a total school commitment. Administrators informed the writer that numerous facets such as: the changed teacher and student role, parental attitude, physical structure of the classroom, and educational supplies must be considered prior to implementing an individualized program.

The writer became aware of the professionalism of teachers involved in individualized programs. Teachers spoke in positive terms about individual students, spent additional time preparing materials for students, were enthusiastic about the new role of diagnostician rather than lecturer, and were up to date on recent literature on individualization. In addition, the writer noted the creativeness and cooperativeness of the majority of these teachers. Teachers expressed that once they were released from tradition, routine, timetables, regulations, textbooks and final examinations, they were able to think about students as individuals.
This chapter will attempt to give an overview of how to individualize a program without exorbitant sums of money or an excess number of personnel.

**Key Vocabulary - Children's Literary Books**

The philosophy of Key Vocabulary is that the teacher elicits from the grade one student his "best" word for the day. These words become the basic sight vocabulary from which sentences and stories are written. All the effective teaching techniques used in reading programs are employed to ensure learning, Key words become effective tools for learning. They make it possible to zero in on the student as an individual and to nourish each student's feelings and thoughts.

When the student is able to write and read independently, he then begins reading literary books, i.e. library books. These books become the core of the reading program. Now, the central theme of the reading program is free choice and self-selection of reading materials. A major value of this practice which was clearly evident to the writer is that it uses the built-in motivation for reading.

A teacher in this program must be both a diagnostician in the sense that she must determine what mechanical skills are required by the student and a guide who encourages students to utilize their time in purposeful learning activities. Likewise, students should become more self-directed, self-selective, and, in time develop the ability to evaluate their progress. In this manner, students are guided to accept a more active role in learning.
Comprehensive records are kept by both the teacher and student. From information accumulated in the teachers record book, a teacher may prescribe for an individual student, group students to teach a particular skill, or reach a decision to teach the entire class. In short, the record book provides data from which future planning takes place.

The writer had the opportunity to speak with Dr. J. Veatch who is responsible for introducing this program in U.S.A. schools. Among the numerous articles and books written by Dr. Veatch: "Teaching Children with Children's Books" is the most concise book which outlines the expectations of Key Vocabulary Children's Literary Books.

Schools visited by the writer involved in this programs were:

4. Midland Elementary School, Midland, New Jersey.
5. Cleveland School, Chandler, Arizona.
Language Experience Approach

Dr. Van Allen, presently at Tuscon, Arizona, is widely known for his contributions to the Language Experience Approach, and individualized program developed for grades one to three.

The philosophy behind the Language Experience Approach is a logical one; the child comes to school with an extensive background of experiences in listening and speaking; therefore, why not draw upon this experience in teaching the child to read and let vocabulary and sentences proceed from it? Hence, centered on a language arts approach rather than just reading, this individualized approach attempts to develop reading through the use of the children's own experiences; both real and vicarious and in terms of their language needs.

In this program the teacher must integrate all the mechanical skills in reading while still capitalizing on the student's creativity. The writer observed that it was also required that teachers spend a certain amount of time planning experiences for the students, providing materials required in an experience, grouping students for certain skill teaching, and, most important, guiding the student.
to be creative thus, developing the ability to project his individuality in his learning activities.

The teacher has the responsibility of providing time for the students to discuss things that interest them. Frequently, the discussions are spontaneous, but, sometimes, the teacher plans an experience which children can share. A planned experience is followed by a discussion and the teacher suggests that the children might write a story. The children compose sentences which the teacher writes on the chalkboard or long sheets of paper, saying the words as she writes them. When she finishes, the sentences are read aloud by the teacher who underscores with her hand as she reads. She may then have the class read it aloud. This approach has many variations but it contains one essential. The children compose, and then read stories about things which interest them. This approach requires the making of numerous charts and, then, compiling them in booklets to form the basis of the reading program.

As soon as the students are able to write their own stories independently, students make individual books in which they frequently illustrate to clarify their stories. Therefore, early in a student's school life he becomes an author of a story which fellow students are able to read.
The writer observed the program in different stages at the following schools.

1. Meyanoki School, Braddock Road, Fairfax County, Virginia.


Multi Media - Multi Text Approach

Multi media-multi text approach may be referred to as an instructional technique which employs several basal readers, i.e., Linguistic series, Phonetic series, within a single classroom or school. In addition to the readers, any other available instructional material are employed to facilitate the instruction of and reinforcement of skills.

With our growing knowledge of the psychology of learning, cumulative data on students, results from achievement tests, and results from Informal Inventories, teachers are in a position to choose a reader which may meet the needs of a particular group of students.

Looking at this approach to meet individual needs, the writer feels that there are two vital facets which must be considered.

1. The reading level of each student must be considered. This would require periodic comprehension tests. Teachers would be required to interpret results, group students
with similar reading deficiencies, and prescribe a suitable reader for the group of students.

2. In addition to the reading level, flexible grouping is the key of such a program to meet individual needs. The majority of schools visited by the writer employed a three group system within a classroom but the entire school was involved in either cross grouping or stratified grouping. In many instances, a testing period occurred upon completion of a reader or the teaching of a particular skill and regrouping occurred.

Schools visited by the writer at present involved in this program were:


3. Emerson Elementary School, Jacksonville, Florida.


6. Floranada School, Fort Lauderdale, Florida.

7. Nova School, Fort Lauderdale, Florida.
Individually Prescribed Instruction

Individually Prescribed Instruction which was developed by Drs. Glasser, Bolvin and Linvall at the University of Pittsburgh, Pennsylvania, is based on a carefully sequenced and detailed listing of behaviorally stated instructional objectives. Each objective tells exactly what a pupil should be able to exhibit, his mastery of the given skill and content. Also, each objective is sequenced in order, that is, each one will build on those that precede it and, in turn, be a prerequisite to those that follow it.

The material itself is geared to the instructional objectives and each student is able to proceed quite independently with a minimum of direct teacher instruction.

Both the I.P.I. reading and mathematics programs comprise of a series of tests which are self-administered by the pupil. A pre-test's results which can be corrected by the aide or the teacher become the base from which the teacher is able to diagnose student difficulty and from which she is able to prescribe particular exercises to meet individual student needs. Upon completion of the prescribed exercises, a post-test is administered. An achievement of eighty-five percent or better must be obtained before the student is permitted to go to the next step.
No text is used in I.P.I., instead, all learning activities come in a booklet form which are expendable by students.

The reading program is divided into two stages:

a. Programmed Reading based primarily on the Sullivan Readers in the early stages of reading and, later on Scholastic paperbooks.

b. Reading Skills Continuum, which is a number of various worksheets exercises covering the skill areas in reading. These materials are also expendable by students.

In all I.P.I. schools visited by the writer, at least one aide was employed to assist in the marking of students' assignments and tests. The teacher assumed the role of diagnostician and prescribed suitable exercises for individual students. In this program, the students became more self-selective and self-directed since they assumed the responsibility of gathering their learning materials each day.

At present, I.P.I. schools are found throughout the U.S.A. and last year were introduced in Alberta.

The writer had the opportunity of visiting the following I.P.I. centres:

1. Intensive Learning Centre,
   Fifth and Lucerne,
2. Washington School,  
   Trenton, New Jersey.

3. Richland School,  
   Quakertown Community School District,  
   Quakertown, Pennsylvania.

Multi-Text Approach

Broward County mathematics teachers have developed S.A.M.I.  
(Scientific Approach to Mathematics Instruction), a series of  
testing booklets covering all skills required by students at differ- 
ent grade levels. This group of teachers has also studied several  
mathematics texts at different grade levels. Each of the probes  
covers material in the corresponding texts. The format of S.A.M.I.  
is relatively simple. Students are given a probe which is corrected  
by a volunteer aide or paid aide who in turn submits the results to  
the teacher. The teacher's role is one of a diagnostician and pre- 
scriber. From student test results, the teacher is able to pre- 
scribe a student into several texts. Students are given a choice  
of text to use.

A teacher in this program keeps a record of each students'  
progress. From these records she is able to decide which students  
to group for a formal teaching lesson. At times it was observed  
that students grouped themselves and peer group teaching appeared.  

Numerous schools other than those in Broward County, Florida,  
had developed a very similar individualized mathematics program.
Schools at present involved in an individualized mathematics program are:

1. Palm Springs North Elementary School, 8101 N.W. 176th Street, Hialeah, Florida.
2. Floranada School, Fort Lauderdale, Florida.
3. Emerson Elementary School, 8001 S.W. 36th Street, Miami, Florida.
4. Cypress Elementary School, 5400 S.W. 112 Court, Miami, Florida.

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While surveying individualized programs in reading and mathematics, the writer observed various interesting aspects involving educational change. The writer feels that the following aspects may be of some interest.

Innovation

The term "Innovation" was widely used by educators throughout Canada and the United States. In many instances the writer was informed that innovations in schools were the result of a commitment made to a school system. Educators indicated that before an innovation was considered all aspects on the educational spectrum should be considered.

(Teaching Staff) The Teacher

Individualization starts not with procedures, but with a creative perceptive teacher, one who believes children want to learn; who thinks with children rather than for them; who basically respects the individual behavior of every youngster; who works with children in an orderly but not rigid way. This teacher views
individualization as consistent with the total design of living with children in a classroom.

**The Classroom**

A special type of classroom is not a prerequisite of individualization. The writer observed individualization had been successfully implemented in both traditional classrooms and modern open-area carpeted classrooms. However, one important aspect is to be considered; the physical setting of the furniture in a classroom either lends to individualization or hampers individualization. Since students are continually sharing experiences and working together in individualized programs, a variety of desks or tables along with a variety of arrangements of furniture should be considered. In addition, the writer was informed that if a room contained even a small carpet it was more conducive to a more informal setting.

**Flexibility**

Flexibility is the keynote of individualization programs because a particular methodology used on its behalf will not work with the same success under all circumstances. It was observed that individualization is not a single method with predetermined steps in procedure to follow nor is it a laissez-faire method of instruction. The writer became aware that numerous groupings emerged within a single classroom which required the teacher to adjust teaching instructions to meet the needs of individual students, a group of students, or the entire group of students.
Paraprofessionals

With the great demands of an individualized program, schools engaged the assistance of paraprofessionals or volunteer aides to assist the teacher(s). The writer observed that paraprofessionals were employed in numerous routine jobs such as: supervising independent study activity, assisting students to locate particular learning material, listening to students read orally, dictating words in spelling, correcting student exercises, typing and stenciling material, and supervising lunch-rooms. This enabled the teacher to devote her time to actual teaching and professional development activities.

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CHAPTER VII

CONCLUSIONS

Individualized instruction is not a thing, neither is individualized instruction a form of private tutoring nor a panacea for all the ills of teaching reading and mathematics. Individualized Instruction's usefulness is dependent upon well-defined purposes and values. The most important variable is the classroom teacher who must accept a philosophy committed to meeting the individual needs of children having a wide range of interests and abilities.

In-service programs should be offered to interested teachers. During the in-service teachers would be exposed to various facets of individualization which include exposure to articles and books written by leading educators in the field of individualization. Teachers must be prepared for their new role of diagnostician and guide rather than lecturer. In addition, they must become more knowledgeable about individual learning differences existing within a classroom.

Classrooms within the Calgary System should undertake the task of individualizing reading and mathematics. The writer observed individualized programs which had been in operation for several years. Educators interviewed indicated that they were
extremely pleased with the results of the program. Classrooms selected should cover the entire spectrum of socio-economic levels existing in a city in order that a careful study could be made of the effectiveness of the program.

Since the writer's return to Calgary an individualized reading program was piloted at St. Mary's Elementary and Junior High (now St. Monica Elementary School) a school in a lower socio-economic area of the city.

With the approval of the school system six other classrooms have been selected to become offshoots of the original Pilot-Program. To assist teachers in the implementation of the program, the writer, with the assistance of personnel in Central Office assimilated material selected during the surveys. This material has become part of the professional literature for the six teachers chosen to individualize their reading program. In addition the writer felt that a handbook was a must if a measure of success was to be achieved, thus, a handbook was developed for the aforementioned teachers.

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TRANSITIONAL PLANS IN INSTRUCTING
THE INDIVIDUALIZED READING PROGRAM

Change begins in the thinking of people desiring change. The teacher, the supervisor, the principal initiates change in the mental process of noting what is plausible and feasible situation for change. Once the decision has been reached some discussion among the people involved is most desirable. The interaction in staff development must be part of the program. Teachers are aides to one another through the sharing of experiences and ideas which have been theirs. Teachers must discuss and even do things they will do in a classroom.

When the program has become a reality in their thinking, parents profit from some understanding of the school's reading program; children, too, benefit from discussion and planning for change.

Classrooms involved in Individualized Reading must reflect the wide world of books. Gathering materials is a primary step in the transition to an Individualized Program of reading. Reading material of varying interests and difficulties reflecting those of the children in each particular classroom should be made easily available to members of the class.
For many teachers, the transition to another is a step by step process. Introducing the entire class to a different way of working, helping a single student achieve in a more self-satisfying manner, experimenting with a reading group (any reading group) are all means of transition.

On the other hand, a transition through programs may be realized through a scheduling technique; one day a week, two days, three days schedules, or half-year experimentation. Whatever is satisfying to teacher, pupil, and administration, there accompanies it well thought out plans for work.

From a basal-series textbooks program to an individualized reading program

Basal textbooks contain interesting stories that appeal to many children. Freeing the bonds, permitting a comfortable reading pace to be kept by each student as he sees fit makes them even more enjoyable.

Frequently, a single group of children or all group of students may be permitted to read a complete unit of reading. Since students read at different rates of speed, supplementary books in a similar area are provided to be read by individuals when a unit is completed. Teachers who have made this change have adopted other individual practices including conferences and creative activities.
In his booklet published by William C. Brown Book Company of Dubuque, Iowa, Richard Wilson charts a schedule of change in the following manner:

a. The first week the high group has individualized reading, Thursday and Friday while the average and low groups have group reading.

b. The second week the high group has individualized reading Wednesday, Thursday, and Friday; the average group has individualized reading Thursday and Friday while the low group continues group reading.

c. During the third week the high group has individualized reading Tuesday, Wednesday, Thursday, and Friday; the average group, Wednesday, Thursday, and Friday, the low group Thursday and Friday.

d. During the fourth week the high group has individualized reading the entire week; the average group Tuesday through Friday, and the low group Wednesday through Friday.

e. In the fifth week, both high and average groups continue individualized reading all week while the low group has individualized reading Tuesday through Friday.

f. In the sixth week complete transition has taken place.

This plan of gradual change appears to be appropriate and acceptable for many teachers.
Complete transition with the entire class

When a teacher commits herself to complete transition from one program of instruction to another, children should understand the manner in which the reading program is to be sustained. Planning with the class is important. Dr. Veatch, professor, at the University of Arizona, Tempe, Arizona, suggests "role play" when introducing an individualized reading program to an entire class. In role play, a student goes through all the actions, i.e., choosing a book, reading quietly, recording the books and difficult words, have a conference, work on follow-up activities, and other independent activities, while the rest of the class observe. The teacher becomes a participant in "role play" as she also goes through the actions of guiding book selection, having a conference, teaching a skill or skills, prescribing a follow-up activity and suggesting numerous other activities.

Generally, after two or three sessions of "role play" and when children are aware of their new role in reading, the total class becomes involved in individualized reading.

One group at a time

Teachers desiring a slower step by step entrance into an Individualized Reading Program may follow a pattern similar to that of a complete classroom transition but have limited the change to a group by group process working through the individualization process
with one group until security has been achieved and adding an additional group to the practice of the program intermittently as the school year progresses.

Sometimes a teacher may begin with a single child, adding a number of children to the program as the year progresses. Before the year is completed a transition has been made with the entire classroom.

Teachers who make this step change sometimes conduct Individualized Reading one day a week for a period of time. The inclusion of a second day occurs within a short period of time. A third day may be included when the teacher and students find it desirable. Some teachers continue the three-day, two-day program throughout the school year.

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SCHOOLS AND OTHER CENTERS VISITED

Muirhead School,
Muirhead Road,
Toronto, Ontario.

Dewson Street Elementary School,
Inner City School,
Toronto, Ontario.

Dr. Di Meo,
Reading Specialist,
John Hopkins Education Centre,
Miami, Florida.

Northeast District Reading Center,
William Jennings Bryan Elementary School,
1200 - N.E. 123rd Street,
Miami, Florida.

Mrs. Shouldice,
Reading Co-ordinator,
Northeast Jennings Bryan Elementary School,
1200 - N.E. 123rd Street,
Miami, Florida.

Mr. Charles J. Sherwood,
Former Editor of the Michigan Journal,
1200 - N.E. 123rd Street,
Miami, Florida.

Highland Oaks Elementary School,
20500 - N.E. 24th Avenue,
North Miami Beach, Florida.

Gratigney School,
11905 North,
Miami, Florida.
Palm Springs Elementary School,
8101 - N.W. 176th Street,
Hialeah, Florida.

Miami Lakes Elementary School,
Irwin Lakes,
Miami, Florida.

North Miami Senior School,
800 N.E. 137th Street,
Miami, Florida.

Dr. Shaefer,
Reading Specialist,
Barry College,
Coral Tables, Florida.

Mr. Snyder,
Thomas Jefferson Junior High School,
Miami, Florida.

Floranada School,
5251 - N.E. 14th Way,
Fort Lauderdale, Florida.

Emerson Elementary School,
8001 - S.W. 36th Street,
Miami, Florida.

Cypress Elementary School,
5400 - S.W. 112th Court,
Miami, Florida.

Nova Schools,
3521 Davie Road S. W.,
Fort Lauderdale, Florida.

Suzzie Talbot Elementary School,
Jacksonville, Florida.

Pine Forest Elementary School,
Jacksonville, Florida.

Holiday Hill Elementary School,
Jacksonville, Florida.
Dr. Spache,
Reading Education,
University of Jacksonville,
Jacksonville, Florida.

Dr. Sheldon,
University of Saracuse,
New York, New York.

Dr. Durkin,
University of Illinois,
Chicago, Illinois.

Miss Kelly,
Supervisor,
Prince George County,
Maryland.

Meyanoki School,
Braddock Road,
Fairfax County, Virginia.

North Springfield Elementary School,
Springfield, Virginia.

Crestview Elementary School,
Lloyd Street,
Springfield, Virginia.

Dr. J. Franseyth,
Department of Health Education and Welfare,
Washington, D.C.

Intensive Learning Centre,
5th and Lucerne,

John Hancock Demonstration School,
Morrell and West Crown Crescent,

Rickenback Laboratory School
Kutztown State College,
Kutztown, Pennsylvania.
Dr. Harvilla,
Kutztown State College,
Kutztown, Pennsylvania.

Kutztown Elementary School,
Annex,
Kutztown, Pennsylvania.

Moser School,
East Union and Dalphine Street,
Quakertown, Pennsylvania.

Dr. Weiss,
New Jersey State College,
Jersey City, New Jersey.

Florence Sawicki,
Reading Consultant,
Midland School,
Midland, New Jersey

James Cauldwell Elementary School,
Springfield, New Jersey.

Dr. Botell,
University of Pennsylvania,

Village Place Elementary School,
Fallsington, Pennsylvania.

Forest Pine Village Elementary School,
Fallsington, Pennsylvania.

Doylstown Elementary School,
Doylstown, Pennsylvania.

Richland School,
Quakertown, Pennsylvania.

Washington School,
Trenton, New Jersey.
S.R.A. Laboratory,  
Dr. Fishbein,  
Chicago, Illinois.

Sister Marianne,  
Queen of Martyrs School,  
Chicago, Illinois.

Welsh Demonstration School,  
Hoffman Blvd.,  
Rockford, Illinois.

Dr. Veatch,  
University of Arizona,  
Tempe, Arizona.

Mrs. Elias,  
Chandler Elementary School,  
Chandler, Arizona.

Cleveland Elementary School,  
Chandler, Arizona.

Navaho Elementary School,  
Tempe, Arizona.

Dr. M. Hunter,  
Demonstration School,  
U.C.L.C.,  
Los Angeles, California.

Dr. J. Goodlad,  
U.C.L.C.,  
Los Angeles, California.

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