Individualized instruction is an educational program in which grade levels and time units are designed to permit the student to work at his own pace and level with the use of unipacs. The unipac, a "unique package," is a specially designed group of learning activities based on specific behavioral objectives chosen by the student. Unipacs consist of two parts: the student's guide and the teacher's guide. The student guide contains a pretest to determine the appropriateness of the particular package, a list of objectives, and a set of self-tests. The student receives feedback first from the self-examinations and secondly from the student-teacher conference, which is the basis of an effective program. The teacher's guide contains background information, learning objectives, post-evaluation instruments, and information on the evaluation of both the self-tests and the post-examinations. The success of an individualized instruction program involves the complete participation of the parent, student, teacher, paraprofessional, and the administrator. The parent should provide encouragement outside of the school environment, while the teacher's duties are redistributed so that he/she is more of an educational guide. The paraprofessional assumes the responsibility for routine duties, and the administrator provides training assistance and encouragement for the professional staff. (DMT)
INDIVIDUALIZED INSTRUCTION AND UNIPACS.

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"The principal goal of education is to create men who are capable of doing new things, not simply of repeating what other generations have done -- men who are creative, inventive, and discoverers. The second goal of education is to form minds which can be critical, can verify, and not accept everything they are offered. The great danger today is of slogans, collective opinions, ready-made trends of thought. We have to be able to resist individually, to criticize, to distinguish between what is proven and what is not. So we need people who are active, who learn early to find out by themselves, partly by their own spontaneous activity and partly through materials we set up for them."

The Concept of Individualizing Instruction

Individualized instruction is an educational program in which grade levels and time units are designed to permit the student to work at his own pace and level. It is not an educational program in which students are grouped exclusively according to chronological age and/or ability and are expected to progress at the same rate. It is an educational program in which well-defined sequences or progressive, behaviorally defined objectives are established in setting up each student's program of study. Student-teacher interaction on a one-to-one basis is extremely important to a successful program. The educational and personal decisions affecting the student are based on a careful study of his abilities, goals, style of learning, and achievement.

Individualized instruction is an educational program in which a student's progress through the program must be properly evaluated so that the program can be adapted to his requirements and readiness. The program may be ungraded and evaluation is competency-based. A variety of student needs can be met with
unipacs and individualized instruction. It is not a program in which the student fails if he happens to be a "slow learner" in a traditional room. Individualized instruction is an educational program in which the student is teacher-guided/learner-directed. The responsibility for learning is placed upon the student. The objective is not to "control" but to involve the student in learning how to learn. It is not a program which seeks to control the student and force him into a lock-step conformity. A multimedia approach is utilized and the student is guided in his learning by the unipac. The student may use many unipacs during one course, and he may not use exactly the same unipacs for a particular course that another student might use. The unipac, a "unique package," is a specially designed group of learning activities based on specific behavioral objectives chosen by the student in conference with the teacher. Each student in the class may be using different unipacs, or several may be working on the same one. Individualized instruction is an educational program in which special professional training is available to the staff so that they can evaluate and diagnose student performance. It is not a program in which the teacher acts in non-professional roles such as ticket salesman, study hall supervisor, bus chaperone. Individualized instruction is not a warmed-over workbook approach to education. It is not less work for the teacher or the answer to all educational problems. As student unrest, financial problems, high student dropout rates, and teacher discontent grow, there is the ever-increasing awareness that traditional approaches to educating the young are not meeting the needs of the individual or of the society. Individualized instruction can play an exciting and effective part in the drama as the role of education is changing within the community. "Student control," reinforcement of rigid standards of conformity, and outdated curricula may evolve into educational programs featuring preparation for the changing environment, the teaching of problem-solving skills, and the instilling and promotion of a love of learning. Individualized instruction fits into any "course of study." The "courses of study" may be a full year or at least a semester in length. The units of work require from two to six weeks of work, and they are comprised of several unipacs. Each unipac focuses on one major-concept, skill, or value and is comprised of from one to several lessons. The selection of a unipac of interest to the student and based on a student-teacher conference concerning the needs of the student is one of the first steps undertaken in a program of individualized instruction. Pre-evaluation of the student's knowledge of the subject matter in the unipac determines whether or not he will proceed with the learning activities. If the results of the pre-test indicate that the student has already achieved the objectives of the unipac, he selects another unipac instead of proceeding with the learning activities. He discusses with the teacher the various alternatives before the decision is final. If the student continues with the unipac after the pre-test, the required learning activities are completed and he has the opportunity for optional activities which suit his own style of learning. Student-teacher conferences are very important at this stage of the program also, and they are central to the success of an individualized instruction program. It is extremely important that the student be appropriately matched with the learning activities so that he might be challenged but also experience success. Self-tests are included in the unipac for the purpose of ongoing
evaluation so that the student may have feedback on his progress in achieving the learning objectives of the unipac. The results of the self-tests may indicate that the student needs additional learning activities, or that he is ready to move on to another section of the unipac.

Post-evaluation is decided upon by the student and the teacher after conferring on the results of the self-tests. The post-evaluation determines whether or not the student has achieved the learning objectives on which the unipac is based. If he successfully completes the post-test, he may choose a quest activity or he may proceed to another unipac and begin the cycle again. If the student does not successfully complete the post-test, he may choose additional learning activities before he tries the second post-test, or he may choose another unipac.

Quest activity selection, if that decision is made, provides the student with an opportunity to pursue at his own level of sophistication some topic related to the unipac. Quest activity evaluation is a matter for the student-teacher-conference. Together, they examine the results of the student's endeavors.

Roles and Responsibilities of the Teacher, Parent, Student, Paraprofessional and Administrator

The individualized instruction "family" includes the teacher, the parent, the student, the administrator, and the paraprofessional. It is very important to the success of the program that each member of the family assumes the responsibility for his portion of the total program. In a program of individualized instruction the role of the teacher moves from that of a dispenser of facts to that of an educational guide. The teacher who stands in front of the room trying to teach the same facts to all students at the same rate has no place in individualized instruction. In individualized instruction there is more student-teacher interaction on a one-to-one basis, as well as in small groups. While paraprofessionals assume responsibility for routine duties often assigned to teachers in the traditional system, the teacher is available in her office for conference.

The role of the parent is one of participation in the education of his child. Ideally he encourages the student to take advantage of his opportunities, rather than remaining the outside in the role of passive parent. The parent no longer views his role as the one who deals out reward and punishment for grades.

The student is not regimented in an individualized situation. He makes decisions and moves from one area to another when he needs to. The traditional school has always sought to control students, keep them quiet, reward them for conformity. The student becomes responsible for his own education instead of depending upon someone to "teach" him.
The paraprofessional assumes the routine duties such as the grading of objective tests, the supervision of students in the resource center, assisting students, and the keeping of records, freeing the teacher for more professional responsibilities.

The administrator is the educational leader of the school, providing inservice training, assistance, and encouragement for the professional staff. He is in charge of educational planning and finance. No longer is he viewed as the man who says "No" and who disciplines the naughty students.

The idea of the library is expanded to that of an Instructional Materials Center (IMC) which includes many other learning materials besides books and magazines. The professional librarian is in charge of the IMC and assisting students. In an individualized instruction program the librarian is not responsible for such routine duties as monitoring study halls.

The Unipac or "Unique Package"

Unipacs consist of two parts: the student's guide and the teacher's guide. After the selection of a particular unipac by the student, he uses the student guide as a source for his activities.

The first activity for the student is to answer the questions on the pre-test provided at the beginning of the unipac. The results of the pre-test, scored by the paraprofessional staff member if it is objective in nature, are an indication of whether or not the student should continue with the unipac. Perhaps it is too advanced and he needs to select a more appropriate one, or, on the other hand, he might already have achieved the objectives of that particular unipac and he may move on to another. The student guide has the objectives listed so that the student can understand just what he is to accomplish while engaging in the learning activities. Objectives are included for the affective domain of learning as well as for the cognitive domain. As the student selects and completes each learning activity, he is ideally learning the methods, the facts, the processes, and the concepts which serve as the bases for the unipac. The student need not complete every learning activity but may select those most interesting to him.

As the student progresses from one learning activity to the next, there are at least two sources of feedback to aid him in achieving the learning objectives. One source is the self-test which is included in the student guide. He may answer the self-test items and check his answers with a key provided. The self-test may indicate that he needs to complete additional learning activities in order to attain the desired objectives. If his test score is sufficiently high, according to the established criteria, he is ready to move on to another section of the unipac.

The second source of feedback for the student is the student-teacher conference so basic to an effective program of individualized instruction. The teacher, after viewing the results of the student's learning activities, may advise the student of other helpful material and activities, may offer instruction in trouble areas, and may answer student questions concerning the activities or self-tests.
When the student feels that he has accomplished the objectives of the unipac, he may take the post-test by obtaining a copy from the paraprofessional in the testing area. The post-test is scored by the paraprofessional and the teacher and indicates whether or not the student has achieved the desired objectives. If he has, he may select a quest activity or move on to another unipac. If he has not, he selects additional learning activities which could be helpful to his trouble areas, and then he may take another post-test. After successfully completing the post-test, the student may elect to choose a quest activity. These activities provide opportunities for the student to pursue on his own level of sophistication an interesting issue or problem related to the unipac. When he has completed the quest activity, another student-teacher conference provides feedback on his endeavor.

The teacher's guide to the unipac contains background information, the learning objectives on which the student unipac is based, the post-evaluation instruments for the student unipac, and information on the evaluation of both the self-tests and the post-tests. The learning objectives on which the student unipac is based may be designed to promote cognitive learning and affective learning, as well as psycho-motor development. The teacher's guide also has a listing of the audio-visual equipment, materials, and technological needs necessary for the student's involvement in the learning activities.

The Physical Plant

The Instructional Materials Center replaces what is traditionally known as the library; however, the IMC has other materials besides books and magazines. Audio-visual materials and equipment are provided, as well as provisions for individual study and group study. The IMC is staffed with professionally trained personnel and may also have paraprofessional staff. In a school designed for individualized instruction there are several Resource Centers. One logical organization would include one Resource Center for fine arts; a second Resource Center for practical arts; a third Resource Center for language arts and social studies; and a fourth Resource Center for science, math, and health. The Resource Center is staffed with paraprofessionals who assist the students in locating the proper materials and equipment for use in completing the learning activities. Provisions for unipac storage are also included in the Resource Center.

The testing area is used by the student for pre-tests and post-tests. When he is ready for the test, he goes to the testing area and asks the paraprofessional supervisor for the proper test and answers it there. The paraprofessional supervisor scores any objective questions and keeps records for the teacher.

For the proper functioning of an individualized instructional program, small group discussion rooms and large group presentation rooms must be provided. The small group discussion room may accommodate two to twenty students who need to work together. The large group presentation rooms are used for lectures or other activities which may be given for fifty to a hundred or more students.
The provision of office space for teachers is necessary because of the extensive use of student-teacher conferences. While the paraprofessional staff takes care of the routine duties of the school, the professional staff is free for professional duties.

Another facility which is central to the proper functioning of a program of individualized instruction is a media preparation room or rooms for use by students and teachers, as well as by the professional media consultant.

Alternatives and Degrees to Which a School or School District May Individualize Learning

An entire school or school district need not be included in a program of individualized instruction. A single classroom or the classrooms of a particular department may be individualized. The Resource Center may be located adjacent to the regular classroom or even within it. Provisions can be made for use of audio-visual materials and equipment and unipac storage. Another room located nearby could serve as the testing area for the department, or if only one classroom is involved in the individualized program, the testing area could be located within the classroom.

The first step in initiating an individualized instructional program is to get the approval and support of the department head and the building principal, as well as one or two other teachers in the department.

Once approval for the program has been granted, the learning materials, equipment, and unipacs are assembled and the classroom or department is reorganized to accommodate storage, individual study facilities, and a corner for the use of the audio-visual equipment if it is to be within the classroom. Moving the classroom near to the existing library may solve some of the storage problems.

Realizing that one critical need in a program of individualized instruction is individualized materials, the Institute for the Development of Educational Activities established the UNIPAC Bank. This "bank" was initiated with the idea that those who contributed materials could withdraw them also. The unipac came into existence as an example of teacher-made learning materials. There are over 2000 unipacs, for use in grades K-12, in the UNIPAC Bank, each with an evaluation sheet to provide for feedback from the user.

IDEA Unipacs may be ordered from the UNIPAC Catalog. Unipacs are distributed via a microfilm system, as well as through the catalog, so that the actual Unipac may be examined before it is ordered.

Project PLAN is another type of individualized instruction, developed by the Westinghouse Learning Corporation, the American Institute for Research, and thirteen school districts. Project PLAN consists of several parts, including the objectives, four-page student guides to the teaching-learning units, and a guidance program to familiarize both the student and the teacher with their roles in individualized instruction. A special inclusion in Project PLAN is the two-part Teacher Development program with materials for an in-service training program for teachers.
Once a program of individualized instruction has been utilized in a classroom or department, there are some problems which might arise, resulting from improper organization, from omissions, or from misunderstandings about individualized instruction. A problem common to improperly organized programs is faulty evaluation of a student's needs and capabilities, resulting in mismatching of students with educational objectives and expectations. Acting as counselor is an integral part of the teacher's role in such a program, and in doing so, the teacher is responsible for proper placement of the student.

Another problem, resulting from incomplete understanding of the teacher's role as an educational guide, is that teacher-student interaction is reduced so drastically that the effectiveness of the entire program is jeopardized. The teacher's function is giving constant feedback to the student on his progress and conferring with him concerning the establishment of his educational goals and unipac selection. The paraprofessional does not replace the teacher but assists in the program.

A third problem which might be encountered in an initial individualized instructional program is that cognitive learning may be stressed to the exclusion of affective learning.

If a program of individualized instruction cannot be initiated in a single classroom or department, one can incorporate alternatives to individualize the instruction in an otherwise traditional classroom or school without subscribing to the entire individualization program. For example, the classroom teacher can encourage cooperative student efforts in learning activities. The teacher can also provide the students with substitute assignments to meet their individual needs and capabilities and the opportunity to participate in certain activities without being committed to completion of the entire activity.

Instruction may also be individualized by allowing exceptional student leads, exceptional sequences in subject areas, and by allowing incompletes, late entries, and drops as a matter of routine in order to enhance the student's chances for success and for making his educational relevant to his own needs. A school may partially individualize by using flexible scheduling; programmed instruction; and multiple teacher assignments, allowing the students to choose the teacher he can relate to best.

The Future is Now!

There is a present trend in education toward being self-critical, a trend which has resulted in modern educators speaking out against and exposing the problems which plague education today, hopeful that understanding the problems can affect changes to improve the entire scope of education, from early childhood education to teacher preparation.

Problems cited by these critics of the schools and their curricula seem to fall into several main categories: (1) the irrelevance of what is being taught, (2) the idea that all children are expected to use the same learning materials to get the same results, most often not in accordance with their
needs, (3) that education as they see it in America today is instrumental in killing a child's natural curiosity and desire to learn, and (4) the rigidity of the status quo and the great resistance to changes such as non-graded schools, flexible courses of study, and relevant curricula.

Individualized instruction offers many hopeful solutions to the depressing problems cited by these authors. As educators plan for the future, in terms of years and decades instead of "next year" or "next inspection," individualized instruction could serve as an integral portion of an educational trend which recognizes individual differences, does not label students as failures in kindergarten, makes available to students a wide range of resources and learning activities so that learning is enjoyable and lasting, and is both relevant and flexible in terms of meeting the changing needs of our society.

Alvin Toffler's Future Shock mentions the school of the future as a "school without walls," or in other words, the community itself serves as the classrooms for the students. Each student then pursues a course of study relevant to his interests, needs, and capabilities. Such a plan would offer little space indeed to the traditional classroom which has remained basically unchanged for 200 years, and it would provide an excellent framework for instruction individually tailored to each student. John Bremen in School Without Walls describes such a program as it existed in the Philadelphia Parkway Project.

Student unrest, racial strife, and women's liberation movement are trends in our society which also show resistance to labeling, inequality, inflexibility, and suppression of individual rights.

Another trend in education, that toward the implementation on a large scale of technology, offers yet another indication that individualized instruction is at least a partial solution to education's many problems. As talking typewriters and computers are used in individualized instructional programs, the teacher has the time to assume a new role, that of a manager, a collector of resources, a diagnostician, and a coordinator. Through the use of unipacs and the extensive use of audio-visual equipment required, the student is immersed in films, radio, video-tapes, and television in addition to books, newspapers, demonstrations, and field trips, all media and techniques which can enhance the educational scene.