

## Individualized Instruction : Role of Testing

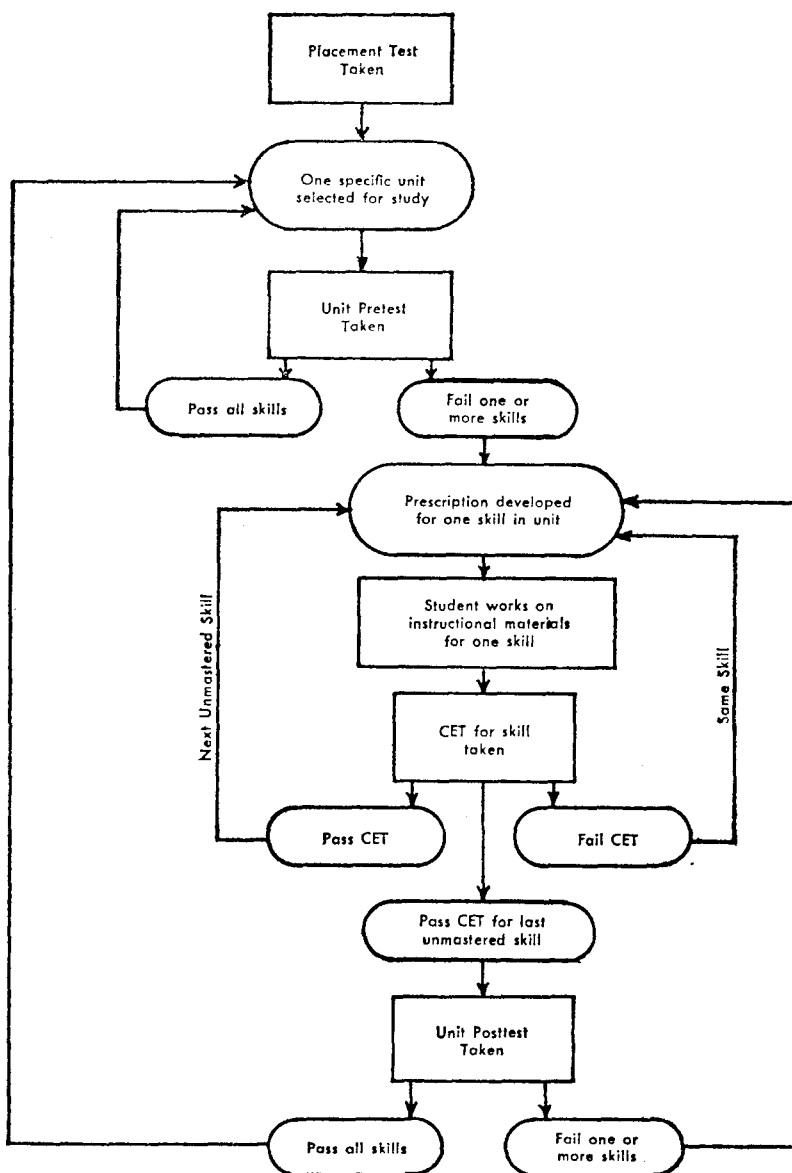
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Rebecca M. Valette and Renée S. Disick define the term “individualized instruction” in their glossary list as a method of teaching that provides for ability differences among students by varying time, materials, course objectives and teaching techniques according to individual needs”. By this method, the objectives that the teacher expects his students to perform are set up, accompanied with well-planned and organized materials. The teaching content is often divided into small units with specific objective (s), and the student is free to work through each unit at his own pace. The objective(s) in teaching unit may be presented through different forms or types of materials to enable the student to choose his own “version” that most suits his needs, interests and abilities. The method of individualized instruction, which is mainly based on individual differences, is thus an attempt to change the classroom situation from a “teacher-centered classroom” to a “student-centered classroom”.

Individualized instruction has been applied to language teaching since the end of World War II. With language teaching, individualized instruction can be practised through many types of programs, such as a “Programmed Material Program” which is suitable for the teaching of reading, writing, grammar and vocabulary, or may involve some sort of “Teaching Machine”, or even a “Computer Assisted Program”. Individual Student Contracts may be used in a typical classroom. A student contract is a pointed statement which describes a certain desired student behavior, suggests activities the student may engage in to prepare himself for this behavior, and presents a sample test. When the student feels prepared, he takes a test covering the behavior. If he fails it, he is assigned additional activities to prepare him to take it again. One lesson may be divided into several contracts. Dr. Francis C. Johnson has proposed many basic assumptions which lead to the setting up of the JILAP (Jacananda Individualized Language Arts Program) in his book, *English as a Second Language : An Individualized Approach*. In this book he also presents a great number of activities and techniques used for the development of the four skills in language learning. Many other programs have been carried out, but basically, the curriculum models for individualized instruction involve the following elements :

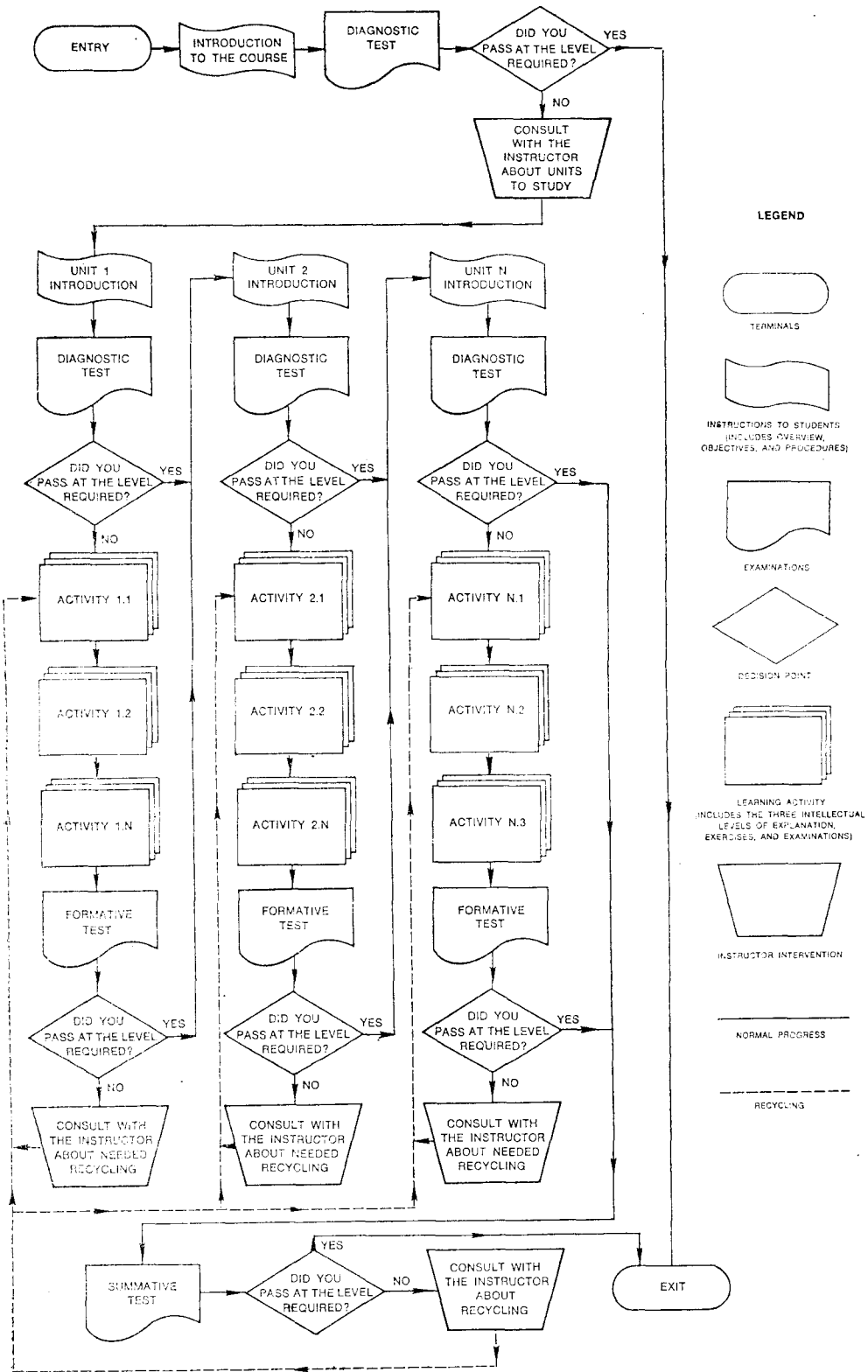
1. Sequences of instructional objectives to define the curriculum. The objectives are generally stated as specific behavioral objectives.
2. Instructional material to teach each objective. Usually, as I have mentioned above, the instructional materials are divided into small units, each unit containing specific objective (s).

**IPI Progress by  
L I N D V A L L   A N D   C O X**



Flow-chart of steps in the cycle for evaluating and monitoring of pupil progress in the IPI procedure

FIGURE 2



This diagram is an adaptation of Searles in *Individualizing English Instruction*, *English Teaching Forum* Volume XVI, November 3, July 1978

3. An evaluation procedure for placing each student at the appropriate point in the curriculum, as well as techniques for evaluating and monitoring individual progress.
4. A plan for developing individualized programs.

I will not go far into the other elements, except for those affecting the evaluation procedure, which itself places a very important role in individualized programs. Two types of testing will be characterized here along with 2 diagrams:

1. John E. Searles and Jo C. Searles's diagram of their individualized program for an English course tested in September 1976 at the Centro de Ensino Tecnico de Brasilia.

2. The diagram of Individually Prescribed Instruction (IPI) which was tested in the subject areas of mathematics, reading and science at the University of Pittsburgh.

Both diagrams illustrate the role of testing in slightly different ways. Moreover, the types of testing used in both programs that I am using as examples can be characterized as:

1. Placement Test
2. Unit Diagnostic Test
3. Curriculum embedded Test
4. Post unit Test
5. Final Achievement Test

I **The Placement Test**, or what is called Diagnostic Test in Searles's diagram, is given to the student at the beginning of the course. It is used to investigate many attitudes of each student's language level, his attitudes towards language learning, his prior knowledge, his level of ability, his needs and interests, his learning styles and other factors which directly or indirectly influence his learning. An ideal individualized program would provide all possible diagnostic instruments in order to gain as much information as possible about an individual. The information obtained from the test serves as data for the teacher so he can determine the most suitable type of material for each student. This is especially useful for elementary students. For intermediate or advanced students, the information helps the student to avoid repeating certain parts of the program or instructional unit which he has already mastered. He can automatically skip to the next unmastered unit; a suitable unit can be prescribed for each student at any time. In Searles' diagram students can even move straight along the route to the "EXIT" terminal if they pass at the level required in the diagnostic test for the whole course. If we consider the purpose of the test, it can be clearly seen that the test should be a criterion. Although finally the test is part of an individualized program, it can be given as a group test.

**II Unit Diagnostic Test** Where the student can not pass at the level required as the objective of the whole course, he will be prescribed a suitable unit to begin with. The unit diagnostic test, or what is shown in the IPI diagram as a "unit pretest", is introduced to remeasure the student's abilities. The whole idea is very much like the placement test. The student may pass all skills in a certain unit, or reach the level of the required objective (s). Again, in this case, he can skip to the next unit. Usually, the student will not pass all of the skills required in the unit prescribed by the placement test. There may be one or more activity or skill that the student still has to work on. Like the placement test, it is suggested that the unit diagnostic test be a criterion referenced test : different unit diagnostic tests are given to different individuals. There is a weak point in Searles's diagram at this point : I don't think students should always have to begin with the first unit, but they should begin with the unit which seems to most suit them, according to the "diagnostic test" at the beginning of the course and "The opinion of the teacher". The student should begin with unit one, if it is suitable, or unit two, three and so on.

**III Curriculum Embedded Test** There is no such test in Searles's diagram. The CET is used in the IPI program between each skill in a certain unit. It is considered as a kind of progress test, and is consequently a criterion referenced test. The CET must be content-referenced to the particular objective it is intended to test. Since only one objective is being tested, the test is generally quite short. The teacher will use the result of the test as information on which to base a decision whether to advance the student to the next skill or activity or to assign additional instructional exercises for the same objective.

**IV Post Unit Test**, or what is titled 'Formative Test' in Searles's diagram, provides an end of unit measure. When satisfactory performance has been attained on all the objectives of all activities in an instructional unit, there is a need for reassessment of performance on the unit as a whole. This requires another decision from the teacher. Diagnostic information will help the teacher decide whether or not the pupil should proceed to the next unit in the program. Failure indicates that remedial work, or recycling is necessary on one or more objectives. As suggested by the title in Searles's diagram, the test should be a formative test : Students who fail, can take the test again after working on necessary remedial work. The opportunity to take the test goes on being provided until he can pass it and proceed to the next unit.

**V Final Achievement Test** The purpose of the final achievement test is much the same as that of the post unit test. But, instead of reassessing performance on the unit as a whole, it is the reassessment of all performance, and the attainment

of all objectives in the course as a whole. There is no such test in the IPI diagram and it seems to me that student could keep recycling through the program without reaching the end of the course. In Searles's diagram, however, I do not agree that the final test of the program is, as it is entitled, a summative test, because in Searles's program the students still have the opportunity to "consult with the instructor about recycling". If it is as diagrammed, the test should be a formative test and consequently more extensive version of the post unit test. What I mean by a final achievement test is a real summative test given at the end of the course. In a real life classroom the limitation of sufficient time is unavoidable. Therefore, after giving much opportunity through the course, there should be a final achievement test to measure the sum of "output" which the student should be able to perform. The result of the test can be used in two ways :

1. As data for planning or guiding future learning programs or activities for individual students.

2. As data which can be analyzed in such a way that it leads to improvements in materials and in the instructional system which make up the whole program.

As you may have seen, testing plays an important role in the individualized instruction program. The role of testing enables educationalists to study the individual and his performance as well as the learning situation. This promises an increased understanding of the learning process and the development of increasingly effective instructional programs.

## References :

1. Francis C. Johnson, (*English as a Second Language : An Individualized Approach*) London, John Murray (Publishers) Ltd, 1973.
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3. Rebecca M. Valette and Renée S. Disick, (*Modern Language Performance Objectives and Individualization*) Harcourt Brace Javonovich, INC., 1972.
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5. John E. Searles and Jo C. Searles, (*Individualizing English Instruction*) English Teaching Forum, volume XVI, November 3, July 1978.