

AN EVALUATION OF SELF-INSTRUCTIONAL MATERIALS IN A
VENEZUELAN INSTITUTE OF HIGHER LEARNING

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Abstract

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A formative evaluation was completed at a Venezuelan Institute of Higher Learning to assess, the effectiveness of the self-instructional materials in the area of Language and Communication. Also examined were the student's attitudes towards the materials and the Institute's program. The evaluation was conducted in order to determine whether the high attrition rate was due the poor design of the materials and/or attitude of the students toward the Institute's program. The subjects consisted of seventy-four individuals enrolled in this Institute. Pre- and post-tests were used to evaluate the cognitive domain. Attitude questionnaires were employed for the affective domain. The questionnaires examined three major topics: course content, course format and the Institute's program. Biographical data was gathered about the learners, age, previous experience on individualized instruction, and so on. The results obtained from the evaluation suggested that the instructional materials were somewhat effective, and that several identifiable obstacles

prevented greater success. Module 1 was more effective than module 2. Problems on module 2 were significant, and included length and complexity as major problems. The level of achievement required in this Institute was also deemed excessive given the content being covered. Results from the attitude questionnaire showed that Individualized instruction is accepted by the Venezuelan population, but not in exactly the way it is being implemented. Changes are suggested for the instructional materials, and for several aspects of the Institute's overall system.

Dedicated to my parents

M.A.K.K.

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TABLE OF CONTENTS

CHAPTER		PAGE
I	Statement of the Problem ;.....	1
	Rationale.....	2
	Teaching institutions in Venezuela.....	4
II	Literature Review.....	9
	Toward developing new approaches.....	9
	Education Change.....	12
	Characteristics of I.U.P.E. "J. M. Siso Martinez".....	13
	General Training.....	15
	Professional Training.....	15
	Specialist Training.....	15
	Learning System.....	16
	Evaluation of Student Academic Perfor- mance.....	16
	The nature of evaluation.....	17
	Statement of the results of the e- valuation.....	17
	Distance Education.....	18
	Individualized Instruction.....	21
	The Institute's Instructional System.....	26
	Formative Evaluation.....	27
	Influences of Educational Technology in Latin America.....	29
	Innovations.....	32

CHAPTER	PAGE
III Method.....	35
Evaluation Process.....	35
Target Population and Sample.....	36
Student Selection.....	37
Design.....	38
Course Design.....	38
Content Selection.....	38
Brief description of the content.....	38
Research and Evaluation Design.....	39
Instructional effectiveness.....	39
Affective effectiveness.....	39
Materials.....	39
Directions for the subjects.....	40
Instructional Modules.....	40
Module 1.....	40
Module 2.....	41
Instruments.....	41
Cognitive tests.....	41
Affective measures.....	43
Questionnaires.....	44
Course Format Questionnaire.....	44
Module Content Questionnaire.....	45
Program Questionnaire.....	45
Biographical Data.....	45
Procedure.....	45

CHAPTER	PAGE	
IV	Results.....	49
	Instructional Effectiveness.....	49
	Affective Questionnaire.....	50
	Biographical Data.....	60
V	Discussion.....	63
	Cognitive Effects.....	63
	Attrition.....	64
	Affective Responses.....	67
	Module Revision.....	68
	Conclusion.....	70
	REFERENCE NOTE.....	73
	REFERENCES.....	74
	APPENDIX A.....	83

LIST OF FIGURES

FIGURE

PAGE

1

Formative evaluation.....

47

TABLE	PAGE
1 Means, Standard Deviations, Percent of Content Correct, and Percent Gain on Pre- and First Post-test scores for Module 1.....	51
2 Means, Standard Deviations, Percent of Content Correct, and Percent Gain on Pre- and First Post-test scores for Module 2.....	52
3 Number of Students at Specified Mastery Levels on Post-tests A and B.....	54
4 Clusters for Course Format Questionnaires...	56
5 Clusters for Course Content Questionnaires...	57
6 Age, Frequency.....	61
7 Jobs, Number of Subjects.....	62

CHAPTER I

STATEMENT OF THE PROBLEM

The demand for technically qualified individuals in Venezuelan society has increased dramatically, and thus has the need for educating and training them. By the mid 1970's the existing Venezuelan universities were no longer capable of providing adequate education and training required for the expanding system. Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez" (I.U.P.E. "J. M. Siso Martínez") and its accompanying system were therefore created to address the technological needs of the country.

The Institute was conceived along lines of England's Open University, with modifications to meet the cultural context. Most instruction was, and is being designed on a self-instructional basis. The modules include printed and audiovisual materials such as language laboratories, television studios, video-cassettes, and films. While some of these materials have been in use for years, contrary to the basic tenets of sound instructional design (Gagné & Briggs, 1974; Friesen, 1971), no evaluations have been conducted on any of them. Nor have the instructional materials been revised.

The main purpose of this study was to conduct such an evaluation. The evaluation model generated by this study

was revised based on the results. The revised method would then be applied to course materials and program objectives throughout the Institute.

This study's evaluation involved the self-instructional course "Language and Communication in Spanish." It has five modules which are designed for completion over a period of six months. The evaluation was restricted to modules 1 and 2, both because of the heavy early drop-out rate of the course, and because of the self-pacing aspect which led to greater and greater timing and performance differences among learners.

The evaluation was necessary to determine if the behavioral objectives were being met, and to assess the students' attitudes in order to discover where the problems were, and how they might be solved. The formative evaluation was conducted in a decision-making context, using systematically gathered data to assist in the revision of the course format and content. Also analyzed were the general characteristics of the Institute's overall program, and the supports and incentives provided.

Rationale

Latin America has one of the highest population growth rates in the world (after China). The population of the continent has been increasing at the rate of three percent annually. La Belle (1976) has pointed out that Latin America is confronting a set of common and

interrelated social problems to which solutions are being sought. Education is seen as one of the principle long-term solutions.

For many Latin America countries, educational development has become essential in order to improve the standard of living. Marta Sosa (1978) has stated that the only way people from lower strata can enjoy some of the benefits of richer people is through education.

The societal problems are further complicated by the fact that oil rich countries like Venezuela desire development aimed at transforming a simple agricultural society into a modern infrastructure of industries in a short time. Although this aim may be praiseworthy, it ignores the basic needs and existing social patterns of the indigenous society. Leaders in Venezuela see the arrival of modern industries as a solution to many of the country's problems; they often tend to buy the most modern technology for prestigious rather than pragmatic reasons. This tendency towards technological change applies to education as well. However, educational change is by its very nature slower and more deliberate. By importing inappropriate modern technology, a less developed society can find itself facing unexpected hazards. The complexities of the native society must therefore be fully considered.

There can be little doubt that education and development interact. Any attempt to bring society up to ac-

ceptable standards of living presupposes a massive effort to educate its members, and to improve their productivity and the quality of their lives. Hence, the first requirements of any future industrial society is an education which imparts the essentials of modern technology. One of the first groups of people involved in this process of technological change are teachers and the teaching institutions.

Teaching institutions in Venezuela

The need for improving teacher education became apparent in the early 1950's (Holmberg, 1981). In order to address this problem, higher education had to be expanded. In doing so, higher education had to respond to two sources of pressure. First, the increased number of students who wanted to enroll in higher education had to be considered. Second, the level of higher education had to be improved in order to adequately confront the complexity and specialization of the disciplines being developed. Thus, in the last two decades, Venezuela has firmly committed itself to the development of its human resources, especially at the technical and professional levels.

In the mid 1970's, universities were faced with an extremely high registration. They also realized that there was a discrepancy between the kinds of careers for which they purportedly prepared the students and the

instruction and content they were providing. The Institutos Universitarios were created as part of the solution. One of these "Colleges," Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez" Caracas, has been trying to meet this ever-growing need for career oriented opportunities in higher education.

The Institute offers technical career training in such areas as electricity, mechanics, mathematics, physics, and chemistry.

This Institute was created in April 1978 for people who needed quality education at a low cost. Student demand for academic upgrading was a prime factor in its creation. A second and different issue was that of the social benefits it offered. This Institute provided educational facilities to a group that had no access to traditional education for economic reasons. I.U.P.E. "J. M. Siso Martínez" was created as an attempt to provide an alternative channel to higher education for school drop-outs unable to find places in the conventional institutions. One of the primary difficulties in creating such an alternative is that there are no existing models, the tradition models having been rejected.

Due to a variety of constraints, traditional notions of education can no longer provide Venezuelans with adequate educational opportunities. Unfortunately, the need for change is urgent, but the fear of change is a product of lack of information (Loucks & Hall, 1977; Dwyer, 1977), and the necessary information is being absorbed

only very slowly. The changes which are occurring are creating a major trend toward individualized instruction. This trend will likely continue and accelerate as better techniques are developed for improving not only what the students learn, but the way they learn it, and at the same time satisfy the needs of society.

Individualized instruction is an approach which can take place in any structure. One does not need an open classroom or an open space school, but rather an open philosophy about an individualized program of continuous progress (Nuñez, Note 1). Individualized instruction not only provides the students with necessary tools for mastering learning, but also increases the learner's self-achievement. It promotes knowledge enrichment, a variety of learning technique and allow self-pacing. This approach to instruction directs its attention to individual differences and provides feedback (Goforth, 1972).

In the Institute (I.U.P.E. "J. M. Siso Martínez"), much of the curriculum is flexible and self-instructional. Students learn by themselves with supporting materials, and have a tutor or instructor to guide them in their activities in the process of learning. The Institute has a fundamental objective based on "learning by doing." Innovation is part of this Institute.

Much work on individualization is already underway and several institutes have implemented large sections of their programs on an individualized basis.

The main purpose of this thesis was to conduct a formative evaluation on the self-instructional aspects of the Institute. The goal was to diagnose the difficulties that the students have with the instructional materials and its support system, and to provide information that might help the students to advance through the programs. Solutions are needed in order to adapt this system to the Venezuelan context and make it more functional. The extremely high course drop-out rate has been one indication that the system is not yet functioning properly. An evaluation of the materials, and an assessment of the learners' attitudes are the first steps in identifying the source of the problem.

The systematic development, revision and assessment of instructional materials and processes used in this thesis are standard tools used by educators involved in the curriculum development process (Sarapin, 1975). The actual evaluation was designed to determine some of the problems of the system. The evaluation was an analysis of a general required course which contained all the central characteristics of the instructional format of the Institute. The attitudes of the students towards the Institute are largely determined by their experience in this course because it is compulsory and completed at the onset of their studies. An analysis and evaluation of this course was therefore seen as an ideal opportunity to generate not only a better course, but to generalize the

format results towards other courses within the Institute. The results could provide an idealized future model for the instructional design and development of courses throughout the Institute system.

The broader, attitudinal responses about the Institute were seen as subjective but useful probes into its structure and logistic. Its overall effectiveness is central to its success. A systemic view of education is necessary to contribute lasting solutions to pressing problems.

CHAPTER II

LITERATURE REVIEW

The first section of this review is an overview of some of the changes in higher education curriculum as they have developed during the past few decades. The second section addresses innovation that must be taken into consideration in continuing and improving the process of development as it applies to the Institute.

Toward Developing New Approaches

The search for new programs and methods of instruction is a continuing process. In the 1950's and 1960's there was a large and sustained effort to reform curriculum and instruction. It was regarded by many educators as an era that would transform the schools. The New York State Commission of Education wrote in 1960, "Never before have so many new approaches developed in such a relatively short period... New methods of organization, the use of new technological devices and new concepts of the role of the teacher provide answers that members alone cannot provide" (Allen, 1960, p. 6).

The developers of the Institute during the 1970's were able to benefit from knowledge of the many innovations which has appeared. The primary approach followed was that of individualized instruction, although aspects of many other techniques contributed. Those methods which were considered as are a part of the Institute's

curriculum are reviewed below.

Individualized instruction as reviewed in Chapter 1, employs content, materials and activities which provide a unique one-to-one teacher-student relationship. Most of the individualized programs are quite structured, and provide for a curriculum stated in behavioral objectives, with proficiency levels, pre- and post-testing, prescribed materials, and learning tasks for each student (Ornstein, 1982). More is discussed on this format later.

Educational television was designed to enable master teachers to reach students, and to reduce some of the inequalities of educational resources and to make available instruction in specialized subjects. The Institute's use of this technology is presently limited, although its potential is great.

Programmed instruction was derived from B.F. Skinner's principles of operant conditioning. A relatively small unit of information called a frame is presented to the learner as a stimulus. The learner is required to make responses by answering a statement. Through a feedback system, the learner is informed if the response is correct or wrong. If wrong, he or she is told why. If correct, the response is reinforced. Programmed instruction is the forerunner of present day self-instructional modules. It provided an important link with a new philosophy of education and learning theory. It is a subset of techniques within individualized instruction, and while not used

explicitly, has served as a useful model.

Team teaching is an approach where two or more teachers combine their abilities and interest to complement each other, and assume joint responsibility in teaching students. The tutorial aspects of the Institute employ a sort of team teaching. Course development is also a team effort. The aim of the Institute is to maximize the skills of all personnel, thus keeping education costs lower.

Computer assisted instruction is a system capable of presenting individualized material with feedback and correction simultaneously to perhaps hundred of students, depending on the number of terminals available. These sophisticated systems permit the students to conduct a dialogue with and ask questions of the computer (Ornstein, 1982). This approach is presently being explored as a potential part of the Institute's curriculum.

Other innovations which emerged between the 1950's and 1970's which have had some influence on the Institute are differentiated staffing, flexible scheduling, resource centers, language laboratories, simulation and gaming, instructional materials center, independent study, and direct study. Historically, most of these promising plans were tried for a short time and then dropped or modified. When any single technique is used as an instructional method, it is bound to fail when generalized. However, when many different

methods are combined to serve the unique needs of the environment, the likelihood of success is greatly increased.

Educational Change

In Venezuela, little progress has been made in changing the education system or adapting imported models according to the Venezuelan content outside the Institutes. It now appears that the need for innovation has not been taken seriously, based on the almost exclusive use of surface changes, small and isolated innovations, and the lack of a comprehensive approach to change or research. Furthermore, the political and social problems compete with any systematic concern with innovation. Educational research must, however, be done if innovation is to be implemented or effective.

There are some investigations related to innovative curricula. Sachs (1977) stressed the importance of the integration of instructional innovation into the social system, and the need for increased pressure and acceptance of innovativeness. Davis, Abedor, and Witt (1976), working like Sachs, at Michigan State University, found that instructionally innovative faculty members tend to have higher status and come from departments with norms supportive of innovation. Kozma's (1979) study at the University of Michigan suggested that instructional innovation was primarily related to the

extensive use of instructional support centers and the perceived rewards that derive from quality teaching.

Katzlow (1977) reported that social/structural factors were a more profound determinant of attitude toward innovations than personality variables and demographic traits. However, as one curriculum committee (Note 2) observed:

"Regardless of the process used for curriculum development, no curriculum is ever perfect, no complete, nor can it remain static. Weak points and inconsistencies will continuously arise in even the most carefully developed program... The individual teachers, curriculum committees and administrators should therefore strive to continuously evaluate and refine the... curriculum."

If the curriculum format of the Institute is to succeed, a supportive network must exist on an ongoing basis. It must also be recognized that cultural variables in Venezuela are particularly potent in determining social behavior. Education is often viewed as a defender of norms, and thus a less likely locus for innovation.

Characteristics of the Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez"

The Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez", (I.U.P.E.) is an university like institute that has some of the characteristics of a

northamerican junior college. The Institute was created by the Venezuelan government in October 1975. The Institute's objectives and politics are already set in the profile of "Plan V de la Nación, sector educativo", in the political development of technical/scientific, and in the politics of higher education.

The main objective of this Institute is to develop human resources in education according to the needs of Venezuelan. The Institute's program is directed at those who have no university degree.

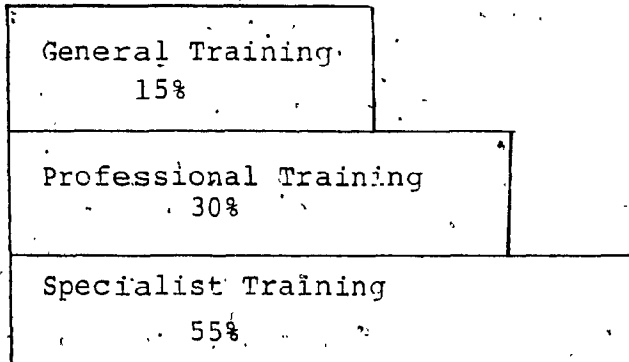
To be accepted in the program, students must possess a high school graduation certificate or its equivalent. In being admitted, the student must undergo the following steps:

1. Psychometric testing.
2. Group interviews.
3. Medical examination.
4. A two days orientation sessions.
5. Registration in the program at Control de Estudio.

Once registered, students follow a plan that includes the following three components:

1. Component of General Training.
2. Component of Professional Training.
3. Component of Specialist Training.

The weighting of these components can be graphically expressed in this way:



General Training. This represents 15% of the curriculum. The students develop their skills in the technical language. This is the section of the curriculum in which the subject of Language and Communication in Spanish is found (the course which is evaluated)

Professional Training. This represents 30% of the curriculum. The main objective is to make future teachers aware of various learning processes. They are given instruction in areas such as philosophy, psychology, curriculum, administration and technology.

Specialist Training. This represents 55% of the curriculum. It deals with specific areas of specialization such as mechanics, physics, chemistry, and mathematics.

The Institute works on a credit system. Students must take a minimum of nine credits each term, and maximum of twenty-one credits. Each area of learning must be completed in 26 weeks. To obtain a degree in this Institute, students must complete one hundred twenty

credits in any speciality.

The numerical credit units are distributed in this manner:

General Training: 18 credit units.

Professional Training: 35 credit units.

Specialist Training: 67 credit units.

The program can be completed in three or four years.

Learning System

The Institute has a fundamental objective based on "learning by doing." Emphasis is placed on individual differences and practice so that the students can develop their own knowledge and skills. This learning system allows the students to study and work at their everyday job simultaneously. They carry a minimum of nine credits. Their schedule is set up in accordance with their responsibilities and their economic means.

Evaluation of Student Academic Performance

In this Institute, evaluation is a systematic, continuous, permanent, scientific and technical process.

The characteristics of this evaluation are:

- It is an element that is considered as a medium but not as a purpose.
- It assumes 100% accomplishment of the objectives.
- It is a process in which participants perform a basic function of autoevaluation of their learning process.

- It permits a comparison with themselves, based on the established requisite of the objectives.

The nature of evaluation. For academic performance, three types of models are used: diagnostic, formative and summative. Each one of these is applicable to the characteristics of each area of learning.

The diagnostic evaluation is done:

- a. Before registration in order to determine the pre-entry knowledge, and to establish the level of learning.
- b. During the process of learning.

Formative evaluation is done during the process of autoevaluation and evaluation of the instructional materials. Summative evaluation is used to determine whether the objectives were attained in each area of learning. Gil (1978) pointed out two main characteristics of the Institute's curriculum as followed:

- Final autoevaluation. This will be performed at the end of each instructional experience of each area of learning. The decision as to when autoevaluation will take place is the responsibility each student:
- Verificative evaluation. This is done in the presence of the instructors, under the conditions of each area of learning.

Statement of the results of the evaluation. During

the academic process of the student, the results are expressed in the following way:

- Qualitative evaluation by using signs "S" or "I", which can be interpreted as following:

Sign	Level of achievement	Significance
"S"	100% of the instructional objectives	Satisfactory grade of performance
"I"	Less than 100% of the instructional objectives	Unsatisfactory grade of performance

- Quantitative evaluation is represented in the curriculum by the number of accumulated credits completed satisfactorily in each area of learning. A record is kept of all students' pace in achieving objectives.

A point should be made here regarding the 100% criterion requirement. The work of Bloom (1965), Gagné (1965), Glaser (1968) and many others shows that the typical level of mastery-learning in achievement testing is about 80 to 90%. To this extent, mastering 100% of the objectives is as unrealistic goal.

Distance Education

England's Open University is a world-wide model for alternative higher education. However, to directly adopt such a model in Venezuela without considering the cultural factors would almost certainly invite failure. Therefore, the Institute selected various characteristics

of this and other distance education institutions is creating its own model. This section discusses what is meant by distance education in Venezuela.

The impact of demographic, social, and technological change on the educational needs of adults is enormous. Technological development and its impact on employment and careers, the rising educational level of the population, the changing role of women in society, leisure time and longevity, changing lifestyles, the rise of "entitlements" among "old" and "new" minorities, all create a need of delivering new educational opportunities.

Adult participation in post-secondary education has grown rapidly in the past decade. Because of this rising level of education, greater demand for post-secondary degrees has increased accordingly.

Distance education was created to offer instruction to those who could not go to an ordinary university for financial, social, geographical or medical reasons (Holmberg, 1981). Distance education is a means of providing adult education, based on a belief in the value of education for its own sake, and also for professional upgrading and for improving social status.

Distance education has been used at the university level for upgrading adult education. Distance education is for those adults who cannot or do not want to regularly attend classes and for people who have limited time to spend on study. These students can rarely dedicate

themselves to full-time study or even half-time study. Ten or fifteen hours a week is usually the most that can be realistically aimed at.

Furthermore, no country in the process of economic development can afford to have a significant part of its labour force uneducated. However, a country can rarely provide the education its population needs by traditional schooling alone (Gerin - Lajoie, 1971; Erdos, 1976). The transformation of the school into a broader educational system concerned with many aspects of education featuring innovative ways of organizing is now a necessity.

One possible way of coping with this problem is the transformation of traditionally school-based educational systems into systems of distance education. For a satisfactory and better understanding of distance education a definition is found in Daniel and Stroud:

"Distance education describes a situation where teachers and learners carry out their essential tasks apart from one another although they communicate in a variety of ways. The fundamental purpose of this approach is to make education more open and widely available by freeing students from constraints of time and geographic distance (Daniel and Stroud, 1980)."

Distance education has intrinsic characteristics that make it attractive to people. First, it helps people to acquire a degree. Second, it is based on personal work

by individual students more or less independent of the direct guidance of tutors.

The distant student is placed in a situation where the individual must select what he should apply himself to, much more so than conventional students whose attendance in a classroom is compulsory. Distant study helps adults to feel more independent.

Individualized Instruction

Individualized instruction is at the center of instructional strategies of the Institute. It is not a new idea. In the last 50 years, advantages offered by individualized instruction have been widely discussed. Educators such as Bloom (1971), Gagné and Briggs (1974), Rowntree (1975), and Mitchell (1980) have recognized the need of individualized instruction.

Bishop (1971) has indicated that instructional methods and organizational patterns in all educational levels have reflected a strong desire to develop and implement more effective techniques according to the individual differences and individual needs of the students. Individualization needs an organization that permits the students:

- to enroll only in activities which are appropriate to their individual differences.
- to their own style of learning.
- to their own rate of learning.

(Mitchell, 1980; Bishop, 1971; Greco and Mc Clung,

1979; Coop and Brown, 1970).

In an organization that emphasizes individual instruction, the students' independence is promoted. The students are given a chance to study beyond the regular curriculum, and the maximum use of instructional resources is encouraged (Bishop, 1971).

I.U.P.E. "J. M. Siso Martínez" is an Institute that takes into consideration differences and needs. Its system is flexible with alternatives of learning, multiple materials and procedures. The Institute gives the student substantial responsibility for planning and carrying out his/her own organized program of studies. The student's progress is determined solely in terms of those plans.

The term individualized instruction (II) is a broad term which refers to methods of instruction such as Keller's Personalized System of Instruction (PSI) and Bloom's (1968) Mastery Learning (ML).

Keller's PSI developed as an outgrowth of the "operant conditioning" approach B.F. Skinner. Features of PSI are described by the following:

1. Self-pacing.
2. Unit-perfection requirements for advancement.
3. The use of lectures and demonstrations as vehicles of motivation, rather than sources of information.
4. Stress upon the written word in teacher-student communication.
5. The use of proctors.

Bloom's ML was developed in the elementary school setting. Bloom (1968) describes his approach as follows: "Our approach has been to supplement regular group instruction using diagnostic procedures and alternative instruction methods and materials such a way as to bring a large proportion of the students to a pre-determined standard of achievement" (p. 8).

Bloom (1968) contends that in order to promote ML, five variables must be taken into account. These variables are:

1. Aptitude for kinds of learning, viewed as the amount of time required by the learner to attain mastery of the task.
2. Quality of instruction viewed in terms of its approaching the optimum for a given learner.
3. Ability to understand instruction.
4. Perseverance in the amount of time one is willing to spend learning.
5. Time allowed for learning.

Essential assumptions of II, according to Cross (1976) include the following:

1. The student is active rather than passive.
2. The goals of learning must be clear and must be made explicit to the students.
3. Small lesson units (frequently referred to as learning modules) deal with a single concept.
4. Learning requires feedback and evaluation.

5. Recognizing the enormous individual differences in the rate of learning...approaches to individualized instruction feature self-pacing.

In evaluating II (both ML and PSI), some critics have argued that it is cold and impersonal. In response to this, Roueche (1976) suggests that, "ML is humanae, because it allows for individual differences. It emphasizes each student's ability to master the course content, and provides the opportunity for honest and open communication between students and instructors" (p. 14).

Still, although II seems to be generally effective, differences can be anticipated related to course content, particularly differences between "hard" and "soft" science. Kulik, Kulik & Cohen, (1979) state that, "individualized instruction made smaller contributions to "hard" sciences than to "softer" disciplines" (p. 1).

A number of studies have been undertaken to determine the effectiveness of II. For example, evaluations of the Personalized System of Instruction (PSI) almost all come to favorable conclusions, as witnessed by the following summary of research given by Taveggia (1975):

"Between 1967 and 1974, a total of 14 published research studies reporting empirical comparisons of PSI and conventionally taught courses appeared in the literature. A recent review and re-analysis of these studies by American Journal of Physics (1976), is

unequivocal in its conclusions as to how PSI fares relative to conventional teaching methods: When evaluated by average student performance, the Personalized System of Instruction has proved superior to the conventional teaching methods with which it has been compared. Not one of the independent comparisons of PSI with conventional methods favors the conventional methods. And, this is true in spite of the type of course in which the study was conducted (e.g., physical science, social science, engineering), or the type of conventional method with which PSI was compared, e.g., lecture, lecture-discussion, group discussion" (Taveggia, 1977, p. 33).

Dubin and Taveggia (1968) also analyzed more than 350 separate studies of American College teaching including independent study. The authors concluded that there was no differences in the learning outcomes of these different teaching methods. Of all these studies, the PSI would seem to be the one exception. PSI did indeed seem to be more effective.

The effectiveness of II has been greatly enhanced by the use of various media (printed material, tape recorder, film, television, computer, etc.). These media give instructors greater flexibility in presenting information. Media also permit the instructor to allow the student some degree of control over the pace of learning. In

explaining individualized learning, Fraizer (1968, p. 616-624) declared the ways of meeting individual needs of the learner and explained:

- Individualized learning is a system of multiple materials and procedures, in which the student is given substantial responsibility.
- The student must plan and carry out his own organized program of studies with the assistance of his teachers.
- The student's progress is determined solely in terms of those plans.

In summing up, then, individualized instruction is characterized by its humanity, flexibility, openness and adaptability, and it is considered as an alternative to the traditional approach to teaching and learning.

The Institute's Instructional System

We shall now turn to a consideration of the modules that are used in the Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez" (I.U.P.E.). The purpose of these modules is to allow learner the opportunity of gaining work experience and of continuing to pursue formal learning activities. Each module is made up of a series of learning experiences, some providing background information, some providing practice activities, and others combining these two functions. Completing these activities should enable the learner to achieve the terminal objective. Acquiring more and

more of the characteristics of a self-learner is one of the purposes of this instruction.

In this research, a formative evaluation was undertaken of the first two modules in a series of five dealing with language and communication in Spanish. These modules were designed by a specialist in this field, and were intended for use by students enrolled in this Institute. The students were under the direction of teacher/educators acting as resource persons.

Formative Evaluation

Evaluation is a process of description and judgment for ascertaining worth (Scriven, 1967; Stake, 1967). It is also the means by which evidence is obtained in order to increase understanding (Stake, 1978). Evaluation is basically a judging process, and is usually defined by a procedure of collecting information in order to make assessments, judgements or decisions (Cranton, 1978).

The instructional program was evaluated to determine whether it reached its objectives. Thus, an important step in this evaluation was to ensure that the instructional objectives were precisely defined in behavioral terms, the results were observable and measurable, and the people selected were the ones for whom this program was intended. The evaluation was also addressed to "non observable" objectives by soliciting attitudinal data from the students.

The greatest service evaluation can be performed is to identify aspects of the course where revision is desirable (Crombach, 1975). Several models were consulted to produce the evaluation procedure. The evaluation model by Dick and Carey (1978) called for data related to the cognitive, affective and psychomotor objectives by the learners and instructors (and society), and the technical aspects of the instructional materials. For the cognitive objectives, Lawless (1979) contributed a useful survey of a model for information processing under the influence of cognitivist thinking. Lawless (1979) pointed out that "While recognizing different kinds of analysis for varieties of purpose and types of subject matter, no issue is paramount. The purpose of such analysis is to establish and to clarify the relatedness of the elements or concepts of subject matter" (p. 335).

Scriven (1967) has recommended that one discover the weak and strong points in the instructional materials. "The General Model of Instruction" is also considered because it is on technology of instruction (Gagné, 1965; Glaser, 1965; and Popham, 1965). A technology assessment model stresses anticipating and evaluating the intended and unintended consequences that may accrue from developing and/or implementing new social technological innovations (Jones, 1972; Locatis and Gooler, 1975; National Academy of Science, 1969).

The teaching technology assessment approach focusses

on side effects but does not ignore intended goals.

This model is used to discover the substantial negative impact of instructional materials. Evidence from instructional program evaluation is sought for use in making decisions about what to revise (Gagné & Briggs, 1974).

A wide array of curriculum development strategies are available. One of the most useful is formative evaluation. Any curriculum builder is almost automatically engaged in formative evaluation. Formative evaluation allows one to decide what is working and what is not, and to better ensure that the goals and objectives are being met (Kaufman & Thomas, 1980). But what seems especially important in formative evaluation for the purposes of testing is the effectiveness of the instructional material.

In the present study, formative evaluation concentrated on the cognitive and affective domains. The evaluation was conducted in such a way that it did not interfere with the instructional conduct of the program.

Influences of Educational Technology in Latin America

Latin American countries currently are suffering increasing educational pressures. In the past, these countries often followed systems of technological education that had little regard for their students, limited knowledge of technology. Students who have been brought

up in a less developed society and have never, for example played with technological toys, require a different approach in the teaching of technology from that used in a industrialized country.

In spite of this, the models imported into Latin America from more developed countries included a number of distortions, and a result of insufficient research, investigation and development of the programs. This was true especially in education. With this problem in mind, a way needs to be found to find a system that focusses less on teaching and more on the facilitation of self-directed learning (Rogers, 1979).

To adapt an educational process, imported technology must be modified from its original characteristics. It can be implemented with a view to the real needs of the country. Adaptation is necessary because of differing needs.

Schultz (1973) indicated that "education is deeply associated with the cultural community, it serves and indeed, the concept of education is different from one community to another" (p. 18).

Providing a historical framework for educational technology, Davies (1974) point out that it is an outgrowth of a number of converging influences upon present concepts and practices in instructional design. According to Lumsdaine (1968), these earlier "inputs" include the following development:

a: interest in individual differences in learning,

as seen in educational and military research and development programs; self-instructional devices such as those of Pressey (1950) and Briggs (1960), and Crowder's (1959) branching programs; in computer applications to instruction; and in product-testing concepts to hardware;

- b. behavioral science and learning theory, as seen in Skinner's emphasis upon contingencies of reinforcement and his teaching machines (1968); and in Guthrie's contiguity theory (1935);
- c. physical science technology, as represented in motion picture, television, and video-tape instruction; and in audio-visual devices to supplement printed media (Gagné, 1974; Briggs, 1974).

All these streams of development can be harmoniously utilized in the design of instructional systems which give primary attention to the individual learner's outcomes.

Keeping in mind this historical and technological background, the I.U.P.E. "J. M. Siso Martínez" was created to bring about change in education in Venezuela in order to meet today's problems. These problems include an increasing number of people seeking higher education and a chronic lack of facilities.

A changing society requires educational research not only to develop and expand the science of teaching, but

also to provide a basis for scientific control and responsible direction of technological innovation (Brown, Norberg, Srygley, 1972). The evaluation used in the present research was based on this unique and evolving specialty called educational technology. Educational technology borrows information from psychology and the behavioral sciences and generates its own as well. In the case of this study, the area of Instructional System Design provides the groundwork for the process of formative evaluation. Research in the area of media will enhance the assessment of print and a/v materials both in cognitive effectiveness and technical quality, which is assumed to be related to both cognitive and affective variables (Kemp, 1980).

The process of generating and evaluating instructional materials, such as those encountered in this study, are addressed by educational technology literature. The results of this evaluation served not only to assess the specific course materials and make suggestions for their improvement but also will serve as a model for future evaluations, subject to the self-correcting process in which it will find itself as it interacts with a new environment.

Innovations

In order to understand the problems which educators face when promoting necessary changes in a cultural area,

one must first examine how different cultures behave. Only by understanding a culture can innovation be introduced. Initially, one must consider that any change in society will bring with it changes behavior. This change will affect the individual's scale of values and his standard of behavior. Consequently, behavioral alterations will appear.

The results of a change will depend on what aspect of a culture is affected. An example of this can be seen in teaching reading. Foster (1964, p. 15) indicated "to teach an adult how to read is not a simple technical problem, but to make an adult to want to learn how to read, or to create a way, that it can be permanently advisable for him/her to do it, it is completely different."

The desire of development and the aptitude for a change, is different for different people. What can be desirable for one person, can be undesirable for others, and what is good for one individual, can be bad for others.

The basic knowledge of social and cultural elements constitutes an essential factor in comprehending the reason behind a resistance of a group or community to innovation in Sciences, as well as, innovation in the educational field.

Education is mainly conservative. Innovation in education can lead to crises, since educators are resistant to change. "The acceptance or the rejection

of an innovation... depends not only on the cultural but also on social, economic and psychological aspects" (Foster 1964).

There are many factors involved that must be considered before innovative processes can be accepted or rejected. For example, in regions where conservatism is deep, the people who express innovative ideas are the objects of criticism and suspicions by the group to which they belong. This usually does not occur in industrial societies because they tend to accept new ideas. Foster (1964) indicates that resistance to innovation can be divided into three categories:

- a. cultural barriers, including values and attitudes, and cultural structure.
- b. social barriers, including group solidarity, conflict and rigid social structure.
- c. psychological barriers, including different perceptions, communications and learning problems.

It is inevitable that whenever there are educational innovation there will be resistance and opposition from individuals, institutions and many time from communities. But there is no conflict without growing. It has been a goal of the Institute not only to introduce innovation, but to integrate and refine it so that its acceptance and worth are no longer questioned.

CHAPTER III

METHODEvaluation Process

The present study was designed in part to evaluate the effectiveness of the first two modules (of a series of five) on Language and Communication. These modules are being used at Instituto Universitario Pedagógico Experimental "J. M. Siso Martínez". Caracas. Formative evaluation was undertaken on the materials. The purpose of the formative evaluation was to identify areas for improvement regarding both the effectiveness of the instructional materials and the students' attitude towards the modules and this Institute's program.

The evaluation procedure required the implementation of the following components:

1. Instructional modules: module 1 and module 2,
2. Cognitive tests on module content,
3. Attitude measures on the module content, instructional format and the Institute's program.

Having identified the components which would be taken into consideration for the evaluation of the product, it was necessary to establish evaluative tools. In order to accomplish this, different sets of materials were designed for each component: (1) pre/post objective tests for the cognitive segment; (2) attitude questionnaires for the affective portion; (3) biographical data

for background portion. This information was required to find out if the students had studied with individualized instruction before.

Target Population and Sample

The instructional materials were designed and developed to be directed at students of university level enrolled in the Institute's program. The sample was composed of seventy-four students who enrolled during the 1st process of Spring (March) 1982. The Language and Communication modules are among the first which students take upon entry into the Institute. It is a required course within the University program, and all the enrolled students were included in the study.

The Institute is for students who want to become teachers in specific areas such as mechanics, chemistry, electricity, physics, and mathematics. The students were unfamiliar with the self-instructional format being employed at this level of education. The course was conducted in Spanish.

The learners' ages ranged from 18 to 48 years, with a mean age of 27. Sixty-two males and twelve females participated. They all had their highschool degree in science or humanities, or its equivalent.

Also involved in this process was the tutor (the professor of Language and Communication who led the students through the self-instructional materials) and the researcher (who introduced and terminated each phase,

and also distributed and collected the questionnaires.)

Student Selection

The students were pre-registered through the control of the Estudio Department. Student selection is based on their pre-requisites necessary to enter to this program. These are:

- An admission test such as psychometric tests and numeric and verbal skill tests.
- Medical test given at the medical center, paid for the Institute. The medical test is necessary for acceptance into this program.
- Group interviews are organized according to the student's schedule to meet each other.
- An orientation is given which covers information about the structure of the Institute, the learning system, the evaluation system, and the areas of speciality.

The orientation session runs for eight hours, broken into four hours daily. Two hours are given to let the students know about the content of the specialization areas. Attendance during these sessions is required for admittance. After these sessions, the students can enroll in their program by registering themselves.

The students immediately buy the materials for their courses in which they enrolled. Most of the students work during the day and study at night. This is a low-income group which generally lives outside the major

urban center.

Design

There are two types of designs in this study. The evaluation design can be represented as follows:

0 = testing

X = treatment

Attitude Format questionnaire: 0X0X0

Attitude Content questionnaire: 0X0X

Program questionnaire: XX0

Cognitive tests: Pre-tests
Post-tests 0X0

for modules 1 & 2

Course Design

Content selection. The Area of Language and Communication was selected because it is a compulsory course. It is among the first courses taken, and provides an initial look at students' reactions to the content and the Program's self-instructional format. Student attrition is also concentrated at the beginning of students's tenure with the Institute. Evaluating their first experiences was therefore critical.

Brief description of the content

The content of the evaluation was separated into two parts, instructional (cognitive), and attitudinal (affective). The instructional component dealt with the content of the program of the area of Language and Com-

munication in Spanish and the students' achievement with the self-instructional materials. The affective segment studied the attitude of the students enrolled in this program as they progressed through the instructional materials.

Research and Evaluation Design

The production was evaluated for instructional effectiveness and affective effectiveness.

Instructional effectiveness

A pre-test/post-test method provided information about the knowledge that the student gained during the process. It also provided information about the pre-entry knowledge that the student possessed in the area of Language and Communication.

Affective effectiveness

The design provided a means of measuring the attitudes of the individuals regarding the instructional content, the format, and the overall program. The corresponding questionnaires were created using a five point Likert-type scale.

Materials

Ten different evaluation forms were designed for the study. They are described in the order of their appearance in the evaluation sequence. All materials can be found in Appendix A.

Directions for the subjects

The directions informed the learners about the evaluation process in which they were going to take part, including the purpose. The students were also told that the procedure would not interrupt their learning process.

The evaluation procedure required the implementation of the following components.

1. Instructional modules: module 1 and module 2.
2. Cognitive tests (one per module).
3. Attitude tests (three--beginning, middle and end).

Instructional Modules. A module is a self-contained, self-instructional unit of instruction. It has an integrated theme, providing students with information needed to acquire specified knowledge and skills, and serves as one component of the program's total curriculum (Dick & Carey, 1978). The course was titled Language and Communication. The modules were developed by the instructors of the Institute. This study constituted the first evaluation of these modules. They had been used for 2 years by approximately 500 students. Each module's content generally progressed from knowledge objectives which were specific and relatively concrete to concepts which were more complex and abstract.

Module 1. This module served as an introductory unit. Its content covered orthography, punctuation, amplifying and summarizing paragraphs and wordings. The goal of

this module was to ensure that all students were at the level of knowledge required to complete the main content of the course.

Module 2. This was the first new content and was the largest of the course. The content was the "message", (e.g., verbal, mixed and non-verbal, natural, etc.).

Instruments

Cognitive tests. Objective pre-tests and post-tests were used for the cognitive portion of each module. The main intention of these instruments was to measure the subject's knowledge about the content of the two modules, both prior to and after the students finished going through the modules.

The types of items were knowledge, and intellectual skills and abilities, which are two major classes that Bloom (1974) provided in the cognitive domain. Knowledge was defined here to include those behaviors and test situations which emphasized the remembering, either by recognition or recall, of ideas, materials or phenomena (Remmers, Gage, & Rummel, 1965).

Knowledge was broken down like this:

1. Knowledge of specifics: The recall of specific bits of information.
2. Knowledge of the ways of organizing studying, judging, and criticizing. This included chronological sequences, and standards of judgment

within a field. Also included were the patterns through which the field of Language and Communication is determined and internally organized.

The abilities and skills objectives emphasized the mental process of organizing materials to achieve a particular purpose (Bloom, 1956). Abilities and skills refer to organized modes of operation and generalized techniques for dealing with the materials and problems. The abilities involved in this category (comprehension) are frequently considered aspects of understanding. There were two sub-categories of comprehension in this module: translation and interpretation. The abilities of the learners to translate represented a minimal level of understanding in this area of study.

The cognitive tests examined the following aspects of the overall program and specific modules: (a) the content of the two modules; (b) the appropriateness, accuracy and completeness of the designed goals; (c) logical structure of the modules; and (d) the relative difficulty of various objectives (too large, too small, or just right).

The test's format was of multiple-choice, fill-in-the-blanks, short answers and matching.

In module 1, four objectives were evaluated: 1) orthographic, 2) use of accents, 3) wording, and 4) punctuation. The pre-and post-test were divided into five sections. Section N^o 1 and N^o 2 were related to orthographic and

accentuation. Section N^o 3 for wording and punctuation marks. Section N^o 4 combined all four objectives.

In module two, three objectives were evaluated: 1) verbal messages, 2) mixed messages and 3) non-verbal messages. The pre- and post-tests were divided into six sections: Section N^o 1 and N^o 2 for verbal message, Section N^o 3 and N^o 4 mixed message, Section N^o 5 for non-verbal message, and Section N^o 6 combined all three objectives.

Affective measures. The key concept chosen for classification in the affective domain is internalization. Krathwohl, Bloom and Massia (1964) discuss this concept as follows: "each affective behavior has a cognitive counterpart of some kind and vice-versa. An objective in one domain has a counterpart in the opposite domain, though often we do not take cognizance of it... Each domain is sometimes used as a means to the other, though the more common route is from the cognitive to the affective. Theory statements exist which permit us to express one in terms of the other and vice-versa." (p. 62)

Affective objectives were generally concerned with the student's attitudes or preferences. The objectives measured were used to determine what attitudes they held before they began instruction and how they felt during and after.

The various measures dealt with the following topics:

(a) the attitudes of the learners towards the self-ins-

structional materials per se, (b) the learner's attitudes towards the instructional strategies and instructors, and (c) the attitude of the learners toward the Institute and its curriculum, and how they felt it will serve their needs.

Questionnaires

The questionnaires contained from thirty to forty-eight statements which were ranked on a 5 point scale from strongly agree to strongly disagree. Likert-type scale was used because it easily permits students to express the extent of agreement or disagreement with a particular statement of an attitude, opinion or judgment (Tuckman, 1972). The questionnaire response labels used the following key: strongly agree (SA) = 1, agree (A) = 2, uncertain (U) = 3, disagree (D) = 4, strongly disagree (SD) = 5. Individual statements were constructed in both positive and negative forms to avoid response set by the subjects (Tuckman, 1972).

There were three types of questionnaires:

1. Course Format Questionnaire.
2. Module Content Questionnaire.
3. Program Questionnaire. (See Appendix A).

Course Format Questionnaire. This questionnaire dealt with the students feelings towards the self-instructional materials. It asked them to assess the technique and compare it with alternatives. It also questioned how they felt it attended to their instruc-

tional and affective needs (e.g., motivation, interests, etc.).

Module Content Questionnaire. This questionnaire dealt with the content of the module, and the variables of instructional delivery.

Program Questionnaire. This questionnaire dealt with the learner's attitudes toward the Institute. Topics included how important the students considered this program for them, what they expected from this program, and did they expect this program to satisfy their career needs in the future.

Versions of the Course Format Questionnaire were given three times, the Module Content Questionnaires were given twice and the Program Questionnaire once.

Biographical Data. Biographical information was sought from each learner. Questions involved experience with self-instruction, age, sex, level of education and expectation regarding their careers. (See Appendix A).

Procedure

The process had ten stages: pre-test, course format questionnaire, module 1 content questionnaire, post-test of module 1, pretest of module 2, course format questionnaire, module 2 content questionnaire, course format questionnaire, post-test, and program questionnaire.

Figure 1 provides a pictorial display of the evaluation procedure. The subjects were first given the biographical data form, and pre-test for module 1 to determine their

previous knowledge during orientation sessions. The subjects were told about the evaluation procedure and its purposes. After the last orientation session, the students had to go to the Control de Estudio for their registration.

The students immediately had to go to the instructor's office to make their appointments for their future consultations. The purpose of the consultation was to co-ordinate the student's activities within the self-instructional format, provide tutorial services, and evaluate and monitor progress through the materials.

Normally the students buy their module materials (e.g., books) after their registration and consultation with the instructor. During the first week, each student has the first regular consultation with the instructor. When the second consultation was held, if the student had covered a significant portion of the module, the Course Format Questionnaire was given. During the next meeting, the Content Questionnaire was administered. When the student had completed module 1 (from two to four weeks), the post-test of module 1 and a pre-test of module 2 were given.

The students continued in the learning process on module 2, during the following several weeks. When the students had their first consultation on module 2, they completed the second version of the Course Format Questionnaire to check on their developing attitudes.

Module 1

Time: 2 to 4 weeks	Biographical Data n = 74	Pre-test A n = 74	Format 1 n = 50	Content 1 n = 47	Post-test n = 42
					Pre-test B n = 42

Module 2

Time: 6 to 12 weeks	Format 2 n = 27	Format 3 n = 21	Content 2 n = 20	Post-test B n = 20	Program n = 20

Figure 1. Formative evaluation

During the next consultation, when the student had covered a significant portion of the module course content 2 is given. During the next consultation, when the student had completed module 2, a post-test of module 2 was given. Finally, a Program Questionnaire was administered terminating the evaluation process.

CHAPTER IVRESULTS

The data were gathered from three sources: cognitive tests, affective questionnaires and a biographical form. The cognitive tests solely evaluated the extent to which the students had mastered the content. The affective questionnaires addressed themselves to the students' attitudes towards the modules' content and their effectiveness, the instructional format, and the overall Institute's educational format, and the overall Institute's educational system. The biographical data were used in an attempt to isolate relevant factors for course improvement.

Instructional Effectiveness

Academic achievement was measured using pre-tests and post-tests for both modules 1 and 2. Both tests were scored on the numeric scale of 20 points, with fixed credit assigned for each correct response. A dependent t-test was applied to the pre- and post-tests to assess the statistical increment in learning. Means and standard deviations are presented in Table 1 for module 1, and Table 2 for module 2.

The results for module 1 showed that there was a significant difference between pre- and post-tests, favoring the post-test, $t(41) = 13.01$, $p < .001$. For

module 2, the results showed that there was a significant increase from the pre- to post-tests, $t(19) = 6.79$, $p < .001$.

The number of students who achieved specific levels of mastery on the post-test of modules 1 and 2 are listed in Table 3.

Affective Questionnaire

The questionnaire items were scored utilizing a five point scale from strongly agree (1) to strongly disagree (5).

Several clusters defining major categories of topics were created for the course format and content questionnaires. These clusters consisted of questions which were related, and to which the subjects could be expected to give similar responses. They are listed on Table 4 for the course format questionnaires. Course content questionnaires cluster are listed on Table 5. All the results for the affective questionnaires appear in Appendix A.

Clusters on the course format questionnaire dealt with the students' feelings toward the self-instructional materials. Matching these clusters from course format questionnaires N^o 1; N^o 2 and N^o 3, a stable or progressively changing attitude was detected, either positive or negative.

In general terms, the results of course format questionnaires N^o 1; N^o 2 and N^o 3 are listed below.

Table 1

Means, Standard Deviations, Percent of Content Correct,
and Percent Gain on Pre- and First Post-test scores for
Module 1

n = 42

	<u>Test Sections</u>	<u>\bar{X}</u>	<u>SD</u>	<u>Total Points Possible</u>	<u>% of Content Correct</u>	<u>% Gained</u>
Pre	1	1.226	.664	2.5	.49	
	2	.845	.934	2.5	.39	
	3	1.631	1.127	5	.33	
	4	1.488	1.145	5	.30	
	5	1.071	1.281	5	.21	
Post	6	1.952	.661	2.5	.78	29
	7	2.083	.505	2.5	.83	44
	8	3.06	1.094	5	.61	28
	9	3.417	.956	5	.68	38
	10	3.179	1.168	5	.64	43
Overall						
Pre-test		6.2619	3.592	20	31	37
Post-test		13.6905	2.975	20	68	

Table 2

Means, Standard Deviations, Percent of Content Correct,
and Percent Gain on Pre- and First Post-test scores for
Module 2

n = 20

	<u>Test Sections</u>	<u>\bar{X}</u>	<u>SD</u>	<u>Total Points Possible</u>	<u>% of Content Correct</u>	<u>% Gained</u>
Pre	1	.175	.245	3	.06	
	2	.175	.406	2	.09	
	3	.400	.700	3	.13	
	4	.475	.638	4	.12	
	5	.900	1.334	4	.23	
	6	.250	.574	4	.06	
Post	7	1.300	.696	3	.43	37
	8	.625	.686	2	.32	23
	9	1.550	.958	3	.52	39
	10	1.825	1.150	4	.46	34
	11	1.975	1.409	4	.49	26
	12	2.350	1.396	4	.59	53
Overall						
Pre-test		2.3750	2.263	20	12	36
Post-test		9.6250	4.617	20	48	

1. Students felt that they could be creative. This attitude did not change over time.
2. They felt comfortable working by themselves throughout the modules.
3. They liked individualized instruction, an attitude which remained throughout.
4. Initially the students felt that they were working within expected time limits. During the early part of the second module, their attitude turned negative, but by the end, they felt the time allowed was reasonable after all.
5. The students always agreed that mastery meant 100% achievement, but a slight negative attitude change occurred at the end.
6. They improved their view of the flexibility of this system from a neutral attitude to slightly positive attitude.
7. The students started with positive attitude about understanding module 1, but this changed to a negative attitude on module 2.

On course content questionnaire No. 1 and No. 2, the general results of these attitude measures were as follows:

1. Students had a stable positive attitude towards the instructors during their consultation.
2. The students had a positive attitude in finding additional information in order to develop the

Table 3

Number of Students at Specified Mastery Levels on
Post-tests A and B

Post-test A

n= 42

<u>%</u>	<u>Subjects</u>
100	2
95	3
90	2
85	4
80	0
75	4
70	7
65	7
60	4
55	5
50	3
4	1

Table 3 (Cont'd)

Post-test B

n = 20

<u>%</u>	<u>Subjects</u>
100	0
95	0
90	1
85	0
80	1
75	2
70	0
65	3
60	0
55	2
50	1
45	2
45	3
35	2
20	2
0	1

Table 4
Clusters for Course Format Questionnaires

<u>Clusters</u>	<u>N^a</u>	<u>Categories</u>	<u>Items</u>
1		Allowed to be creative	F1-Q3; F2-Q25; F3-Q17 \bar{X} 2.22 2.70 1.71
2		Learning by themselves	F1-Q5; F2-Q12; F3-Q25 \bar{X} 2.40 1.44 1.38
3		Preference on Individualized Instruction	F1-Q9-13-17-19; F2-Q29; F3-Q1 \bar{X} 2.65 2.26 2.00
4		Time to finish the module	F1-Q12; F2-Q1-2-2-7-8-21; \bar{X} 1.88 2.76 F3-Q2-10 3.04
5		Mastering 100% of the objectives	F1-Q14; F2-Q19; F3-Q3 \bar{X} 1.78 1.52 2.14
6		Flexibility in the system	F1-Q15; F2-Q18 \bar{X} 2.06 1.60
7		Ease in understanding modules	F1-Q16; F2-Q15; F3-Q8-12 \bar{X} 3.86 1.86 2.64

Table 5

Clusters for Course Content Questionnaires

<u>Clusters No.</u>	<u>Categories</u>	<u>Items</u>
1	Instructors resistant to change	C1-Q2-3-12; C2-Q10 \bar{X} 1.95 1.45
2	Difficulty in the materials	C1-Q7; C2-Q20 \bar{X} 3.87 2.30
3	Good sequence	C1-Q9; C2-Q7-16-17-21-22-23 \bar{X} 1.87 2.88
4	Materials available	C1-Q11; C2-Q24-25 \bar{X} 2.20 3.06
5	Need of consultation	C1-Q17- C2-Q36 \bar{X} 1.68 1.95
6	More audiovisuals	C1-Q20; C2-Q33 \bar{X} 2.30 1.80
7	Usefulness of the modules	C1-Q23-24; C2-Q29-30-37 \bar{X} 1.71 2.08
8	Difficulty in following the instructions	C1-Q26-35; C2-Q2-15-27 \bar{X} 4.02 2.93
9	Vocabulary level	C1-Q32; C2-Q8-13-38 \bar{X} 4.13 2.83

modules.

3. Students had a positive attitude about sequencing at the beginning, but change negative when they went through module 2.
4. They had a stable positive attitude towards the materials that were available.
5. The students liked the consultation aspect, and their attitude remained positive.
6. The students' attitudes were negative regarding the limited use of audiovisuals materials for both modules, and they requested more of them.
7. At the beginning the students felt that the content of the modules was useful, but their attitude changed to negative as they worked through the content of module 2.
8. The students had a positive attitude about the instructions for module 1 but their attitude changed to negative when they went through module 2.
9. They had a stable positive attitude on the level of the vocabulary used in both modules.

There are other minor points that were found important in each questionnaire. These were items which the respondents felt particularly strongly about, either positively (1.8 or less), or negatively (3.8 or more). This range represents approximately one standard deviation above and below the running mean.

On Course format 1 contained the following positive items: the modules were deemed logically sequenced, there was no pressure in their own pacing, and they favored individualized instruction combined with consultation and labs. Also, individualized instruction was perceived to be a desirable novelty in education.

On Course format questionnaire No. 2, positive attitudes were expressed as the students went through module 1, and were thus motivated to go on to module 2. But a module 2, as they did not like it as they had module 1.

On Course format questionnaire No. 3, the learners' overall attitudes turned negative towards module 2. The students disliked this module, and asked for some adjustments in it. The positive attitude towards individualized instruction as meeting their educational goals remained, however.

On Course content questionnaire No. 1, positive attitudes were found towards the instructors, the objectives, and the content of module 1. Also, they encouraged instructional materials to be developed by instructors other than those belonging to the Institute. The content of module 1 was found useful for their present career, and perceived to be so far their future career. Finally, the students felt that orthography was unnecessary to study.

On Course content questionnaire No. 2, a positive attitude towards the content was found on module 2 such as: the content of module 2 was not complex, but the learning

activities were not easy to understand. Students would have liked to have had an opportunity to write their own opinions about the module at the end of each.

The program questionnaire provided a clear picture of this system. They preferred this system over the traditional one. A positive attitude towards the instructors and the Institute was given. Students felt that they were acquiring and learning the necessary skills to meet their educative goals through the self-instructional materials and format. Contrary to expectations, the students answered that they were not waiting to be accepted into the regular universities, and that they felt that this system served the needs of Venezuelan people.

Biographical Data

Information gathered from the biographical data forms regarding their occupation, sex, age, and if they had experience with individualized instruction (See Table 6). Jobs are listed in Table 7. There was one question regarding their experience with individualized instruction. Three had previous experience, and seventy-one had none. The sample was composed of seventy-four subjects, being 83.79% males and 16.21% females. Their ages ranged from 18 to 49 years.

Table 6

<u>Age</u>	<u>Frequency</u>
18-20	6
21-25	26
26-30	22
31-35	14
36-40	2
over 40	4

Table 7

<u>Jobs</u>	<u>Number of Subjects</u>
Accountant	8
Secretary	3
Teacher	5
Electric teacher	5
Salesman	1
Pharmacist	1
Mechanic	8
Physic teacher	1
unemployed	42

CHAPTER VDISCUSSION

The preliminary results offered in the present evaluation suggested that the instructional materials are not the only cause for drop out in the Institute, and are perhaps not even the primary cause as was initially suspected. The following discussion goes into detail about the factors which did appear to play a role in the problems which the Institute is having, and assesses the cognitive and affective results of the evaluation. Each is dealt with in turn.

Cognitive Effects

The results obtained from comparing learner's performance on the pre- and post-tests provided mixed outcomes. Both modules one and two showed a significant increment of learning, both statistically and in practical terms. However, it should be noted that performance on the post-test was usually not 100%, as is required before progressing to the next module. Several additional attempts were generally necessary to reach the criterion. This lack of initial success suggests that students had not effectively anticipated the scope and/or difficulty of the tests. Further study on their part was necessary to achieve the required level. These additional evaluations were analyzed in this thesis because the

author sought only to measure how much was learned during the prolonged study phase. The added post-test beyond the first one included only those objectives not mastered in the previous test. The added tests were thus not accurate measures of instructional effectiveness and not used. As is always the case in instruction, performance data are available only on those who complete all the tasks. This self-selection may have created different populations in the long run, even though initial differences were not evident.

Attrition. Unfortunately, high attrition was still present in this study. The largest loss of students occurred between registration and the first consultation, numbering 24 (out of 74). Due to the high positive ratings which module 1 eventually received from the remaining students, it is unlikely that the content of the module contributed significantly to the attrition. Personal factors such as insufficient study time, transportation problems, and general insincerity are the more likely causes. Future work should be conducted by the Institute to discover the true reasons for this loss. A change in admission requirements, the orientation, and/or instructor and facility assessibility should be entertained.

The second high incidence of attrition occurred between the administration of the module 2 pre-test and the Course Format Questionnaire No. 2, from 42 to 27 learners. Several reasons are possible, some based on reactions

received by those who did proceed. Module 2 was unfamiliar to the students resulting in poor (perhaps discouraging) pre-test performance. The module was also found to be very time consuming. Those who found the first module to be relatively easy may have given up early, believing that they wouldn't succeed. In a sense, they cut their losses short. Interestingly, even though module 2 was considered both too long and much more difficult, only a few people dropped out once they had begun work in earnest. Again, the content per se was unlikely to have caused such abrupt attrition.

One of the main reasons for sudden drop out at the two points cited above is the sequencing structure of the Institute. Students are encouraged to complete the entire five module course in six months, but are allowed to drop out at any time after a given module, and pick up where they left off during the next six months period. If a student feels overwhelmed about the prospect of completing a difficult module, s/he will usually quit early and begin again later. This is common practice in the Institute, and it is for this reason that only those starting module one were used for this study. "Repeaters" constitute a different population, and require separate study. If the Institute wishes to reduce attrition at these points, some penalty must be introduced for very slow progress through the system. If, on the other hand, the above policy is to remain, either attrition must be accepted or instructional changes made, particularly regarding the length of modules.

The results suggest that any instructional changes would best be directed toward module 2. Students took nearly twice as long as the modules was designed for. An overestimate of students' time commitments, an underestimate of the amount of content, and/or inappropriate criteria levels are probably the sources of difficulty. By breaking module 2 in half, the size would necessarily be less imposing, perhaps reducing the number of learners "scared off" at the beginning. More realistic time estimates should be gathered and imposed. A review should also be conducted on the 100% mastery level. This level is generally imposed only where life-and-death psychomotor and perceptual skills are being taught (Gagné, 1977). A 80%-90% level is more appropriate under these circumstances. Even though the students were told during the orientation that mastery in individualized instruction is 100%, many nevertheless questioned the appropriateness of this level in the attitude questionnaires.

At a more detailed level of formative evaluation, students complained that the learning activities were not particularly useful. They disliked the non-competitive "S" and "I" grading approach and would have liked to have been able to react to the module content and its value at the end of each module. Few other concrete suggestions were made with regularity. On the positive side, the learners were very positive toward the individualized format as long as it was combined with consultations.

The respondents responded positively about the course's skills development and its relevance to their careers. Finally, they strongly favored the self-pacing and non-traditional aspects of the Institute's courses.

Affective Responses

The questions in the course format and content questionnaires were grouped into logical topics. A change in attitude over time was particularly sought out, but stable positive or negative attitudes were equally noted. The topics identified areas which are traditionally said to suffer in individualized instructional systems, such as creativity and social interaction.

It was initially hypothesized that many of the problems encountered by the Institute would stem from the lack of correspondence between the instructional method and the Venezuelan context. No evidence was found for such a conclusion. On the contrary, a number of questions scattered throughout the questionnaires regarding the needs of Venezuela were responded to positively, i.e., students felt the materials and Institute served their context very well.

Perhaps even more surprising, the students consistently agreed that the Institute's programs were meeting their present and anticipated career needs. These points, and the whole range of generally positive comments of students as noted in the results, suggest that the main thrust of the Institute and its format is appropriate.

Unfortunately, less light was shed on the concern over attrition. A number of analyses conducted on the attitudes of those who did finish module 2 versus those who didn't produced no significant effects. It had been anticipated that the dropouts would be more negatively inclined on a number of factors, and while some small numerical differences did arise, these differences were not great. This apparent lack of attitudinal differences lends further credence to the argument that personal reasons led to the first round of attrition (before module 1). Future study should examine the attitude of learners after they have dropped out to discover some of their reasons for quitting.

As was mentioned above, the attitude towards module 2 turned slightly negative. From the standpoint of formative evaluation, it is important to note that the negative comments were addressed directly at the module itself, and not the instructional format. It was, in fact, gratifying to see the lack of change in attitude about the Institute's individualized instructional system from its initially positive stance.

Module Revision

Three major points were made by the students regarding module 2. First, the extensive content made the module far too long, especially when taken in contrast with the shorter and more familiar module 1. Many learners suggested that it be broken down into two modules. Second, the module was deemed too complex. One of the great dangers inherent in individualized instruction is the

failure on the part of subject matter experts to simplify the approach to meet the necessarily naive characteristics of the target population. Students expressed negative reactions to the organization, lack of audio-visual materials, and vocabulary. The latter two problems could be easily remedied, while organizational difficulties may well be reduced by virtue of shortening the module. Finally, the students expressed the desire to work in groups as the material became more difficult. This reaction is both typical and predictable. When a learner begins having difficulty understanding content, the natural reaction is to seek out help from others rather than search for the information him/herself (Nuñez, Note 1). Even though the students were quite content with the individual work/consultation combination in module 1, they became dissatisfied with the same arrangement with very challenging material. Two solutions exist. The Institute may consider the establishment of more remedial group work for segments of the courses which present such problems. The second alternative, of course, is to revise the module material to make it more comprehensible, thus reducing the need for group work. The results identified the learning activities as being inadequate in module 2. When improved, these too may help in increasing the students' understanding of the content.

The final point of concern was the failure of learners to achieve mastery on the first post-test. This factor

did not bother the students, as they agreed with the concept of a 100% criterion. However, in the third format questionnaire and the program questionnaire, student response began to move in a negative direction. As long as the material was easy, students tended not to object. As module 2 presented more new and difficult information, the extremely high criterion level became a negative factor in student achievement. Thus, it seems reasonable that a more standard range of 80% or 90% should be adopted. While the reason for the high attrition after module 1 requires more study, it seems clear that individuals self-selected themselves out because of anticipated rather than experienced difficulties. Otherwise, the dropout rate would have been higher during the course of module 2. Students either decided they would battle their way through, or they conceded defeat early. The materials, while less well liked than module 1, still received generally favorable comments, and were evidently effective, as all 20 students completed them to 100% mastery. The module's efficiency, however, was not adequate, students taking twice as long to complete the module. Improved materials and special help at critical junctures should help in increasing the progress rate of students.

Conclusion

The above discussion provides a series of recommendations for improving the modules tested in this thesis.

A number of problems with the instructional system were also identified, but in most cases, more research is necessary before specific conclusions can be drawn. The author found casual interviewing to be a rich source of information when assessing such a program. A more systematic procedure which would eliminate sampling bias would have enabled these data to be included. Nevertheless, the more extreme responses of the group to specific items proved informative. If one were to draw any single conclusion, that would be that any successful instructional system which is considered innovative must be continually responsive to its population's needs. Individualized instruction cannot protect itself under the cloak of "obvious" respectability, especially in Venezuela, and must therefore demonstrate and maintain itself as both unique and better, given the circumstances of modern education.

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APPENDIX A

PRE/POST TESTS

REPUBLICA DE VENEZUELA

MINISTERIO DE EDUCACION

INSTITUTO UNIVERSITARIO PEDAGOGICO

EXPERIMENTAL "J. M. SISO MARTINEZ"

CARACAS

AREA: LENGUAJE Y COMUNICACION

MODULO 2

PRE-TEST B

Post-Test B

CODIGO : _____

APELLIDOS Y NOMBRES: _____

C.I. No.: _____ PROCESO No.: _____

FECHA: _____

FIRMA DEL PARTICIPANTE: _____

PARTE I

Instrucciones: Defina brevemente los siguientes conceptos:

1. Escritura Pictográfica

2. ícono

3. Signo Lingüístico

4. Escritura Ideográfica

5. Significante

6. Escritura Fonética

PARTE II

Instrucciones: Señale las características fundamentales de:

a. Lengua

b. Habla

PARTE III

Instrucciones: Explique brevemente el uso del Lenguaje Coloquial, en uno de los Programas de televisión analizado por usted.

PARTE IV

Instrucciones: Lea cuidadosamente las proposiciones siguientes y luego coloque en el paréntesis respectivo la letra de la columna B que concuerde con la proposición de la columna A.

COLUMNA ACOLUMNA B

- | | |
|---|---------------------------|
| 1. () Movimientos corporales no vocales relacionados con la Comunicación. | a.- Cibernética |
| 2. () Lenguaje dado por la posición del modelo en un cartel publicitario. | b.- Ballom o Ilobo |
| 3. () Lo que sugiere o evoca el mensaje. Su simbolismo. | c.- Comics |
| 4. () Estructura narrativa formada por la secuencia progresiva de pictogramas. | d.- Código gestual |
| 5. () Pictograma utilizado específicamente en el lenguaje de los comics. | e.- Connotación |
| | f.- Significante |
| | g.- Vineta |
| | h.- Escritura fonética |
| | i.- Significado |
| | j.- Indicio |
| 6. () Convención específica de los comics destinada a integrar gráficamente el texto de los diálogos o el pensamiento de los personajes en la estructura teórica de la vineta. | k.- Código Cromático |
| | l.- Comunicación Kinésica |

7. () Componente del signo que equivale a la representación psíquica de una cosa.
 8. () Manipulación del color, buscando el impacto visual.
-

PARTE V

Instrucciones: Analice en el siguiente Cómics, su mensaje deno-
tativo o literal y connotativo o simbólico.

PARTE VI

Instrucciones: A continuación se le presenta un aviso publicitario, analícelo con sumo cuidado tomando en cuenta:

a) Sus tipos de Mensaje: Literal y Simbólico

b) Los códigos que contenga: cromático, fotográfico, morfológico y gestual.

REPUBLICA DE VENEZUELA
MINISTERIO DE EDUCACION
INSTITUTO UNIVERSITARIO PEDAGOGICO
EXPERIMENTAL "J. M. SISO-MARTINEZ"
CARACAS

AREA: LENGUAJE Y COMUNICACION

MODULO 1

PRE-TEST A

POST- TEST A

CODIGO: _____

APELLIDOS Y NOMBRES: _____

C.I. No.: _____ PROCESO No.: _____

FECHA: _____

FIRMA DEL PARTICIPANTE: _____

PARTE I

Instrucciones: Coloca en el espacio en blanco la palabra o palabras que consideres correcta (s), para que la proposición tenga sentido completo.

0.- Ej. El párrafo es la parte del texto comprendida entre dos puntos y aparte.

1.- Las palabras agudas son aquellas que _____

2.- De acuerdo a las reglas de acentuación la palabra "música" es _____

3.- La sílaba tónica es aquella _____

4.- Llevan acento ortográfico las palabras graves o llanas que _____

5.- El acento diacrítico es a que que _____

PARTE II

Instrucciones: Selecciona del siguiente grupo de palabras las que llevan acento ortográfico y explica la razón del mismo.

a. centavo

b. señal

c. mitad

d. mamón

e. filósofo

f. tremula

g. sol

h. lápiz

i. tomates

j. azul

k. periódico

l. terror

PARTE IV

Instrucciones: Resume en 10 líneas el siguiente texto de Samuel Ramos.

La Pedantería

Seguramente que la pedantería es una actitud que tiene su finalidad, es decir, sirve a un propósito más o menos oculto del individuo. Todo pedante da la impresión de ser un actor que desempeña una comedia, y la pedantería es una máscara que oculta, que disimula algo.

Pero, cuál puede ser el mecanismo psicológico de la pedantería?. He dicho antes que el pedante es un inadaptado, y su inadaptación consiste en un deseo de superioridad intelectual que no corresponde con la realidad de su talento o de su saber. La desproporción entre lo que pretende ser y lo que es realmente determina en la conciencia de un conflicto penoso del que resulta un sentimiento de inferioridad. Y cuando el deseo de colocarse en el sitio más alto es tan imperioso que no transige con la realidad, la única manera de satisfacerlo es con el expediente de una ficción. El individuo hace de su vida una comedia de superioridad en la que desempeña un papel para engañarse a sí mismo y restituir el equilibrio a su conciencia desquiciada por el complejo de inferioridad. La pedantería es entonces, ni más ni menos, que un disfráz, una máscara de la que se reviste el sujeto para ocultar algo, y ese algo es un déficit intelectual.

Samuel Ramos, El Perfil del Hombre

PARTE V.

Instrucciones: Redacta un párrafo, de cinco oraciones por lo menos, en donde utilices correctamente los signos de puntuación.

ATTITUDE QUESTIONNAIRE

REPUBLICA DE VENEZUELA
 MINISTERIO DE EDUCACION
 INSTITUTO UNIVERSITARIO PEDAGOGICO
 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Format 1

n = 50

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute. Indicate how you feel about each of the following statements by circling your answer on this scale: SA - strongly agree, A - agree, U - uncertain, D, disagree, SD - strongly disagree. Please consider each statement carefully before you respond, and try to avoid using "uncertain (U)".

Thank you!

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1. I feel comfortable going through the materials by myself.	F. 13 8 26	31 62	4 8	2 4	0 0
	<u>NR</u> F. 24	<u>MEAN</u> 1.90	<u>SD</u> .71		
2. I will develop my skills through the materials.	17 34	30 60	2 4	1 2	0 0
	24	1.74	.63		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
3. I don't think that modules will help me to be creative.	F.	16	20	3	9	2
	%	32	40	6	18	4
	F.	<u>NR</u> 24	<u>MEAN</u> 2.22	<u>SD</u> 1.20		
4. That programmed activities in each one of the modules have a logical sequence.		23	25	2	24	0
		46	50	4	0	0
		24	1.58	.58		
5. I don't believe that the students should learn by themselves.		11	24	1	12	2
		22	48	2	24	4
		24	2.40	1.195		
6. Individualized instruction helps the students to avoid anxiety.		11	19	10	9	1
		22	38	20	18	2
		24	2.40	1.09		
7. In this Institute individualized instruction allows the students to follow their own pace without pressure in their progress.		29	19	1	1	0
		58	38	2	2	0
		24	1.48	.65		
8. I prefer to study with Individualized Instruction because there is less competition with others.		8	20	2	15	5
		16	40	4	30	10
		24	2.78	1.31		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
9. Individualized Instruction is more effective, than the lectures for the learners.	F.	2	21	10	13	4
	%.	4	42	20	26	8
	F.	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		24	2.92	1.09		
10. Individualized Instruction is the most economical way of learning, but not the best.		6	23	7	13	1
		12	46	14	26	2
		24	2.60	1.07		
11. The student will be more active in the learning process with individualized instruction.		11	29	3	6	1
		22	58	6	12	2
		24	2.14	.97		
12. I will finish studying the modules on time.		12	32	6	0	0
		24	64	12	0	0
		24	1.88	.59		
13. I prefer to study with individualized instruction than using only texts.		7	28	4	9	2
		14	56	8	18	4
		24	2.42	1.07		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
14.	The best way to	F. 27	16	5	2	0
	evaluate the achievement	% 54	32	10	4	0
	is to master the 100%	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	of the objectives.	F. 24	1.78	1.13		
15.	This type of instruc-	11	30	4	5	0
	tion is very flexible.	22	60	8	10	0
		24	2.06	.84		
16.	The information given	3	2	4	31	10
	in the modules are not	6	4	8	62	20
	easy to understand.	24	3.86	.99		
17.	I prefer Individualized	3	23	9	13	2
	Instruction than confe-	6	46	18	26	4
	rences.	24	2.76	1.04		
18.	Individualized Instruc-	2	6	6	31	5
	tion is too impersonal	4	12	12	62	10
	even during consultation.	24	3.62	.97		
19.	The student is more	6	26	7	10	1
	motivated with Indi-	12	52	14	20	2
	vidualized Instruc -	24	2.48	1.02		
	tion than lectures.					
20.	The combination of indi-	31	18	0	1	0
	vidualized Instruction	62	36	0	2	
	with consultation, will	24	1.42	.61		
	give better results in					
	the learning process of					
	the students of this					
	institute.					

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
21. Individualized Instruction should be used for elementary subjects, but not for higher levels.	F. 1	5	3	33	8
	2	10	6	66	16
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
F. 24	3.84	.89			
22. The exercises in the modules will benefit the learning process.	25	24	0	1	0
	50	48	0	2	0
	24	1.54	.61		
23. I believe that developing carefully the Individualized Instruction in any type of learning process is effective.	19	22	5	3	1
	38	44	10	6	2
	24	1.90	.95		
24. Individualized Instruction combined with labs and seminars will give the student better learning.	31	18	0	1	0
	62	36	0	2	0
	24	1.42	.61		
25. Individualized Instruction is applicable only for small groups.	4	13	3	24	6
	8	26	6	48	12
	24	3.300	1.22		
26. Individualized Instruction is planned to take in consideration for the individual's differences of the learner.	13	28	6	3	0
	26	56	12	6	0
	24	1.98	.80		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
27. Individualized Instruc-	F. 7	14	3	21	5
tion benefits better	8 14	28	6	42	10
the students of slow	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
pace than the faster	F. 24	3.06	1.30		
pace.					
28. Individualized Instruc-	24	25	1	0	0
tion not only increments	48	50	2	0	0
the personal achievement	24	1.54	.54		
but help to increase					
the knowledge.					
29. Individualized Instruc-	24	23	2	1	0
tion is novelty in	48	46	4	2	0
education.	24	1.60	.68		
30. In each activity that	17	25	4	2	0
is in the modules I	35.4	52	8	4.2	0
will be able to make	24	1.81	.76		
my own decision in					
evaluation.					

REPUBLICA DE VENEZUELA
 MINISTERIO DE EDUCACION
 INSTITUTO UNIVERSITARIO PEDAGOGICO
 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Format 2 n = 27

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute. Indicate how you feel about each of the following statements by circling your answer on this scale: SA - strongly agree, A - agree, U - uncertain, D - disagree, SD - strongly disagree. Please consider each statement carefully before you respond, and try to avoid using "uncertain (U)".

Thank you!

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1. I will finish module 2 as soon as I did with module 1.	6	12	1	6	2
	22.2	44.4	3.7	22.2	7.4
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F: 47	2.48	1.28		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
2.	I'm learning faster with module 2 than module 1.	F. 3 11.1	13 48.1	1 3.1	7 25.9	3 11.1
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		F. 47	2.78	1.28		
3.	I think that the dead line to finish module 2 is not enough.	3 11.1 47	5 18.5 3.26	3 11.1 1.20	14 59.9	2 7.4
4.	Individualized Instruc- tion as a learning process is ineffective for the Venezuelan content.	1 3.7 47	3 11.3 3.89	1 3.7 1.05	15 55.6	7 25.9
5.	There is not enough practive in module 2.	7 25.9 47	12 44.4 2.33	2 7.4 1.24	4 14.8	2 7.4
6.	Illustrations would be useful in module 2.	5 18.5 47	14 51.9 2.41	2 7.4 1.19	4 14.8	2 7.4
7.	The materials to be covered in module 2 are too long.	7 25.9 47	0 0 2.82	7 25.9 1.47	10 37	3 11.1
8.	The complexity of mo- dule 2 won't affect me to finish it on time.	6 22.2 47	10 37 2.52	3 11.1 1.22	7 25.9	1 3.7

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
9.	Individualized Instruction is better for achieving theoretical objectives faster than the practical objectives.	F. 3 %. 11.1	14 51.9	2 22.2	6 7.4	2
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		F. 47	2.63	1.18		
10.	I had many problems to understand the instructions of this module 2.	3 11.1 47	3 11.1 3.56	1 3.7 1.22	16 59.3	4 14.8
11.	This module I motivates me to continue with module 2.	12 44.4 47	12 44.4 1.74	1 3.7 .86	2 7.4	0 0
12.	Individualized Instruction promote me to be more responsible than the traditional system.	15 55.5 47	12 44.4 1.44	0 0 .51	0 0	0 0
13.	Individualized Instruction helps to clarify the goals once accomplishment the learning process.	9 33.3 47	16 59.3 1.74	2 7.4 .59	0 0	0 0
14.	The design of module 2 is appropriate for the Venezuelan content.	4 14.8 47	16 59.3 2.26	4 14.8 .94	2 7.4	1 3.7
15.						

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
15. The objectives must be written in such a way that they can be easily understood by the learners.	F. 12 44.4 NR 47	10 37 MEAN 1.89	1 3.7 SD 1.05	4 14.8	0 0
16. The procedure used in Individualized Instruction implies a progressive evaluation.	12 44.4 47	13 48.1 1.63	2 7.4 .63	0 0	0 0
17. The traditional system of instruction allows more discipline control than the Individualized Instruction.	2 7.4 47	7 25.9 3.25	3 11.1 1.20	12 44.4	3 11.1
18. This type of instruction is very flexible.	14 51.9 47	11 40.7 1.60	1 3.7 .75	1 3.7	0 0
19. The best way of evaluation is to master the objectives 100%	17 63 47	7 25.9 1.52	2 7.4 .80	1 3.7	0 0
20. The lecture type of instruction implies more status.	11 40.7 47	10 37 2.04	0 0 1.16	6 22.2	0 0

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
21. There is too much material to be covered in module 2.	F.	4	12	0	10	1
	%	14.8	44.4	0	37	3.7
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F.	47	2.70	1.24		
22. I prefer to work module 2 to module 1.		1	4	1	14	7
		3.7	14.8	3.7	59.9	25.9
		47	3.82	1.11		
23. Individualized Instruction is not appropriate for the Venezuelan content.		4	17	1	2	3
		14.8	63	3.7	7.4	11.1
		47	2.37	1.18		
24. The materials presented in this area (Language and Communication) are not in consonance with the Venezuelan content.		5	10	4	6	2
		18.5	37	14.8	22.2	7.4
		47	2.63	1.25		
25. Module 1 and 2 don't help me to be creative.		6	9	1	9	2
		22.2	33.3	3.7	33.3	7.4
		47	2.70	1.35		
26. Individualized Instruction is more difficult to develop than the traditional system.		4	7	3	10	3
		14.8	25.9	11.1	37	11.1
		47	3.04	1.31		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
27. Individualized Ins -	F. 4	17	1	4	1
struction doesn't allow	% 14.8	63	3.7	14.8	3.7
groups work.	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 47	2.30	1.03		
28. Individualized Instruc-	3	7	3	13	1
tion in this area must	11.1	25.9	11.1	48.1	3.7
be re structured.	47	3.07	1.17		
29. Individualized Instruc-	8	9	5	5	0
tion is better than the	29.6	33.3	18.5	18.5	0
conferences.	47	2.26	1.10		
30. Individualized Instruc-	7	18	0	1	1
tion as an educative	25.9	66.7	0	3.7	3.7
process is anachronistic	47	1.93	.87		
and it doesn't					
correspond to the social					
aspect.					

REPUBLICA DE VENEZUELA
 MINISTERIO DE EDUCACION
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 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Format 3

n = 21

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute. Indicate how you feel about each of the following statements by circling your answer on this scale: SA - strongly agree, A - agree, U - uncertain, D - disagree, SD - strongly disagree. Please consider each statement carefully before responding, and try to avoid using "uncertain" (U).

Thank you!

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1.	I prefer to work with Individualized Instruction instead of traditional system.	F. 7	10	2	1	1
		% 33.3	47.6	9.5	4.8	4.8
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		F. 53	2.00	1.05		
2.	The time given to finish this module is not enough.	3	9	1	2	6
		14.3	42.9	4.8	9.5	28.6
		53	2.95	1.53		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
3. The best way of evaluation is not to master the objectives 100%.	F. 8 38.1 NR F. 53	8 38.1 MEAN 2.14	1 4.8 SD 1.31	2 9.5	2 9.5
4. Individualized Instruction is not the best way of learning in order to develop our own skills.	2 9.5 53	2 9.5 3.62	3 14.3 1.24	9 42.9	5 23.8
5. I had good feedback from the activities of these modules.	8 38.1 53	12 57.1 1.67	1 4.8 .58	0 0	0 0
6. The content of the modules can be taught effectively through Individualized Instruction.	8 38. 53	9 42.9 2.05	0 0 1.20	3 14.3	1 4.8
7. Feedbacks are not adequate in the modules.	3 14.3 53	12 57. 2.33	3 14.3 1.02	2 9.5	1 4.8
8. Exercises in all modules are not enough.	2 9.5 53	12 57.1 2.29	0 0 1.19	5 23.8	2 9.5

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
9. Individualized Instruction F.	6	9	0	6	0
helps the learner to	28.6	42.9	0	28.6	0
learn faster.					
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
F.	53	2.29	1.19		
10. There is too much material	2	7	1	8	3
to be learnt in a short	9.5	33.3	4.8	38.1	14.3
time.	53	3.14	1.32		
11. The specific objectives do	3	12	1	4	1
not inform me the right	14.3	57.1	4.8	19.0	4.8
things that are accepted	53	2.43	1.12		
as evidence that I have					
done well.					
12. One of the weak points of	1	13	1	5	1
Individualized Instruction	4.8	61.9	4.8	23.8	4.8
is that all the instruc-	53	2.62	1.07		
tions are written, and					
sometimes cannot be					
understood.					
13. I find that I'm least active	0	6	0	9	6
in the learning process with	0	28.6	0	42.9	28.6
Individualized Instruction.	53	3.71	1.19		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
14. I prefer to work on module 2 than module 1.	F. 1 4.8 53	2 9.5 3.91	2 9.5 1.14	9 42.9	7 33.3
15. Evaluation must be on a specific day.	3 14.3 53	3 14.3 3.57	0 0 1.43	9 42.9	6 28.6
16. I consider that In - dividualized Instruc- tion is divorced from the Venezuelan content:	1 4.8 53	2 9.5 3.86	1 4.8 1.06	12 57.1	5 23.8
17. Individualized Instruction motivates me to be creative.	10 47.6 53	9 42.9 1.71	1 4.8 .96	0 0	1 4.8
18. Individualized Instruction turns the learner automator, without decision.	0 0 53	2 9.5 4.38	0 0 .92	7 33.3	12 57.1
19. Individualized Instruc- tion is an implementation of imported educational models.	1 4.8 53	5 23.8 3.33	3 14.3 1.11	10 47.6	2 9.5
20. Individualized Instruction helps me to be critical in my real necessities.	6 28.6 53	12 57.1 2.05	1 4.8 1.12	0 0	2 9.5

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
21. Individualized Instruction is a novelty and not a solution for our educational problems. F.	6	9	1	3	2
	28.6	42.9	4.8	14.3	9.5
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	53	2.33	1.32		
22. With Individualized Instruction the learner had psychological changes (e.g. being more receptive).	7	12	0	2	0
	33.3	57.1	0	9.5	0
	53	1.86	.85		
23. Education must be essentially traditional and through Individualized Instruction It is not possible.	6	8	2	1	4
	28.6	38.1	9.5	4.8	19.0
	53	2.48	1.47		
24. Individualized Instruction is not a rigid pattern of education.	7	5	1	6	2
	33.3	23.8	4.8	28.6	9.5
	53	2.57	1.47		
25. Individualized Instruction helps the learner to be more responsible and careful in his/her educatives attainment.	13	8	0	0	0
	61.9	38.1	0	0	0
	53	1.38	.50		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
26. Individualized Instruction doesn't let me establish my proper educative goals.	F. %. F.	7 33.3 53	8 38.1 2.29	0 0 1.38	5 23.8	1 4.8
27. Individualized Instruction helps me to be successful in my educative goals.		9 42.9 53	12 57.1 1.57	0 0 .51	0 0	0 0
28. Individualized Instruction helps the learner to have his own account of his learning process.		10 47.6 53	11 52.4 1.52	0 0 .51	0 0	0 0
29. Comparing Individualized Instruction with traditional system, II is bad for Venezuelan context.		1 4.8 53	2 9.5 3.95	1 4.8 1.12	10 47.6	7 33.3
30. Individualized Instruction reassures that I am acquiring knowledge.		8 38.1 53	11 52.4 1.86	0 0 1.01	1 4.8	1 4.8

REPUBLICA DE VENEZUELA
 MINISTERIO DE EDUCACION
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 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Module 1 n = 47

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute. Indicate how you feel about each of the following statements by circling your answer on this scale: SA - strongly agree, A - agree, U - uncertain, D - disagree, SD - strongly disagree. Please consider each statement carefully before you respond, and try to avoid using "uncertain (U)".

Thank you!

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1. The instructors make this process of learning as enjoyable as possible.	F. 33 % 70.2	13 27.7	1 2.1	0 0	0 0
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 27	1.32	.52		
2. The instructors are resistant to changes when learners give them feedback on module 1.	3 6.4	17 36.2	11 23.4	12 25.5	4 8.5
	27	2.94	1.11		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
3.	I always found the instructor's attitude positive towards the learners during the consultation.	F. 30	17	0	0	0
		% 63.8	36.2	0	0	0
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		F. 27	1.36	.49		
4.	The objectives were written in order to be easily understood by the learners.	25	19	1	2	0
		53.2	40.4	2.1	4.3	0
		27	1.57	.74		
5.	Imported ideas don't work in the Venezuelan context.	3	25	4	6	9
		6.4	53.2	8.5	12.8	19.1
		27	2.85	1.30		
6.	I have received enough help from my instructors during this process of learning in this area. When reviewing the content of this module. I feel that:	22	22	2	1	0
		46.8	46.8	4.3	2.1	0
		27	1.62	.68		
7.	The instructional materials were very difficult.	1	6	1	29	10
		2.1	12.8	2.1	61.7	21.3
		27	3.87	.97		
8.	The instructors were confusing and vague.	1	0	1	36	9
		2.1	0	2.1	76.6	19.1
		27	4.11	.63		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
9.	The learning activities	F. 11	33	1	2	0
	in the module were	%. 23.4	70.2	2.1	4.3	0
	elaborated accordint to	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	the objectives of the	F. 27	1.87	.65		
	module.					
10.	The learning activities	1	9	2	29	6
	were too difficult.	2.1	19.1	4.3	61.7	12.8
		27	3.63	1.01		
11.	The materials were easy	17	16	2	12	0
	to find.	36.2	34.	4.3	25.5	0
		27	2.20	1.19		
12.	Instructors of this	23	22	2	0	0
	Institute have positive	48.9	46.8	4.3	0	0
	attitude towards the	27	1.55	.59		
	learners during their					
	consultation.					
13.	The most effective way to	15	27	0	5	0
	learn about grammar as	31.9	57.4	0	10.6	0
	presented in the module	27	1.19	.87		
	is through Individualized					
	Instruction.					
14.	The schedule of the ins-	18	26	1	2	0
	tructors of every area	38.3	55.3	2.1	4.3	0
	of learning fitted with	27	1.72	.71		
	the learners schedule.					

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
15. After finishing this F.	22	23	1	1	0
module I'm motivated to %.	46.8	48.9	2.1	2.1	0
do more investigation	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
beyond these objectives F.	27	1.60	.65		
in module 1.					
16. Modules should be	18	23	5	1	0
developed by instructors	38.3	48.9	10.6	2.1	0
who do not belong to	27	1.47	.73		
this Institute.					
17. Consultation always helps	19	26	1	0	1
me to avoid difficulties	40.4	55.3	2.1	0	2.1
in this learning process.	27	1.68	.72		
18. The information in this	26	20	1	0	0
module will be useful to	55.3	42.6	2.1	0	0
my present or future career.	27	1.47	.55		
19. During the developing of	17	29	1	0	0
this module it helps me	36.2	61.7	2.1	0	0
to be more analytical in	27	1.66	.55		
my studies.					
20. Content of module 1 should	6	31	2	6	2
have more audiovisual ma-	12.8	66.0	4.3	12.8	43.3
terials (e.g. film.	27	2.30	1.0		
printed materials,					
cassettes).					

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
21. During the developing	F.	13	29	2	3	0
of module 1 I felt less	%	27.7	61.7	4.3	6.4	0
oppress than being in		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
conference.	F.	27	1.89	.76		
22. Imported ideas are		4	11	6	21	5
contrary for Venezuelan		8.5	23.4	12.8	44.7	10.6
context.		27	3.26	1.19		
23. The content of these mo-		16	26	3	2	0
dules is up to date.		34.0	55.3	6.4	4.3	0
		27	1.81	.74		
24. The content of this mo-		24	20	0	3	0
dule is useful for every		51.1	42.6	0	6.4	0
day life.		27	1.61	.80		
25. To study grammar is to		1	0	1	17	28
waste time.		2.1	0	2.1	36.2	59.6
		27	4.51	.75		
I had problems in:						
26. Following the instruc-		0	9	1	26	11
tions.		0	19.1	2.1	55.3	23.4
		27	3.83	1.01		
27. To understand diagrams		0	4	1	35	7
		0	8.5	2.1	74.5	14.9
		27	3.96	.72		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
28. To use audiovisuals.	F. 0	8	5	27	7
	.8. 0	17	10.6	57.4	14.9
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 27	3.70	.93		
29. To obtain the materials or audiovisual equipment.	1	7	5	28	6
	2.1	14.9	10.6	59.6	12.8
	27	3.66	.96		
30. Module 1 doesn't benefit me to understand other modules from other learning areas.	23	19	1	3	1
	48.9	40.4	2.1	6.4	2.1
	27	1.72	.95		
31. A well educated person uses correct grammar.	8	12	2	11	14
	17	25.5	4.3	23.4	29.8
	27	3.23	1.54		
32. The vocabulary used in this type of instruction is too high to be understood.	1	0	2	23	11
	2.1	0	4.3	70.2	23.4
	27	4.13	.68		
33. The content of module 1 must be developed in the module and not based only on bibliographical investigation.	7	26	2	8	4
	14.9	55.3	4.3	17	8.5
	27	2.49	1.20		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
34. The content of module 1	F. 9	22	4	10	2
based only in bibliography	% 19.1	46.8	8.5	21.3	4.3
investigation for learners	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
is the best learning	E. 27	2.45	1.16		
activity.					
35. I had too many problems	2	2	2	27	16
understanding the ins-	4.3	4.3	4.3	57.4	34
tructions of module 1.	27	4.21	.72		
36. To study orthography is	34	6	0	3	4
unnecessary.	72.3	12.8	0	6.4	8.5
	27	1.66	1.30		
37. In order to speak it is	23	17	0	6	1
not necessary to have	48.9	36.2	0	12.8	2.1
grammatical knowledge.	27	1.83	1.10		
38. The bibliography given	3	12	2	22	8
for objective No. 4	6.4	25.5	46.8	17	
(punctuation) for module	27	3.43	1.23		
1 is not enough.					

REPUBLICA DE VENEZUELA
 MINISTERIO DE EDUCACION
 INSTITUTO UNIVERSITARIO PEDAGOGICO
 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Module 2

n = 20

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute. Indicate how you feel about each of the following statements by circling your answer on this scale: SA - strongly agree, A - agree, U - uncertain, D - disagree, SD - strongly disagree. Please consider each statement carefully before you respond, and try to avoid using "uncertain (U)".

Thank you!

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1. The learners are resistant F.	1	5	1	10	3
to innovations when the %.	5	25	5	50	15
instructors gave them oral	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
instruction about the F:	54	3.45	1.19		
modules.					

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
2. Instructions of module 2	F. 6	8	0	5	1
are not clear enough to	8. 30	40	0	25	5
be understood.	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 54	2.35	1.31		
3. The exercises in module 2	0	5	0	10	5
too are not enough to	0	25	0	50	25
achieve the objectives.	54	3.75	1.12		
4. I prefer to achieve the	6	10	1	3	0
objectives by doing	30	50	5	15	0
exercises.	54	2.05	1.0		
5. The content of module 2 is	1	6	1	5	7
too complex.	5	30	5	25	35
	54	3.55	1.40		
6. The time to finish this	6	5	0	4	5
module 2 is too short.	30	25	0	20	25
	54	2.85	1.66		
7. The learning activities in	3	11	0	3	3
this module 2 make more	15	55	0	15	15
difficult to achieve the	54	2.60	1.35		
objectives of learning.					

	<u>SA</u>	<u>A</u>	<u>J</u>	<u>DA</u>	<u>SD</u>
8. The vocabulary used in F.	4	2	1	9	5
this module 2 is too	20	10	5	40	25
high to be understood.	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
F.	54	3.40	1.50		
9. The bibliography, investi-	7	10	1	1	1
gation pointed out in	35	50	5	5	5
this module 2 is not	54	1.95	1.05		
enough.					
10. The attitude of the instruc-	11	9	0	0	0
tors of the area of	55	45	0	0	0
Language and Communication	54	1.45	.51		
towards the learners					
were positive.					
11. The achievement obtained	12	8	0	0	0
through module 2 will	60	40	0	0	0
help me in my career.	54	1.40	.50		
12. The content of module 2	4	9	0	4	3
should be broken down	20	45	0	20	15
in modules not one.	54	2.65	1.42		
13. The vocabulary used in	4	3	0	12	1
module 2 is too easy for	20	15	0	60	5
this level of learning.	54	3.15	1.35		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
14. The content of this module 2 is to confused related to semiotic.	F. 3 % 15	6 30	2 10	6 30	3 15
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	54	3.00	1.38		

I had problems related to:

15. Following directions.	3 15 54	5 25 3.25	0 0 1.45	8 40	4 20
16. To understand the learning strategies.	2 10 54	3 15 3.50	0 0 1.19	13 65	2 10
17. To develop the learning activities.	3 15 54	8 40 2.90	0 0 1.41	6 30	3 15
18. To find bibliographies.	1 5 54	4 20 3.65	0 0 1.18	11 55	4 20
19. To use audio-visuals materials.	4 20 54	3 15 3.25	0 0 1.45	10 50	3 15
20. To develop the investigations given.	5 25 54	5 25 2.85	0 0 1.46	8 40	2 10

When I went through the module 2. I felt that:		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
21. The instructional materials were easy.	F.	5	12	1	2	0
	%	25	60	5	10	0
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F.	54	2.00	.86		
22. The learning strategies of the module were not matching with the objectives.		1	1	1	14	3
		5	5	5	70	15
		54	3.85	.93		
23. The learning strategies were easy to do it.		5	9	0	5	1
		25	45	0	25	5
		54	2.40	1.27		
24. The bibliography pointed out was too much.		5	5	0	8	2
		25	25	0	40	10
		54	2.85	1.46		
25. The bibliography was easy to find.		5	12	0	2	1
		25	60	0	10	5
		54	2.10	1.07		
26. The learning activities for module 2 was useful.		1	5	0	9	5
		5	25	0	45	25
		54	3.60	1.27		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
27. The instructions given	F. 2	11	0	7	0
in this module 2 the	% 10	25	0	35	0
content were clear and	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
precise.	F. 54	2.60	1.10		
28. The content of module 2	2	4	0	9	5
based on bibliography	10	20	0	45	25
is not enough.	54	3.55	1.36		
29. The content of module 2	7	10	0	2	1
is not useful for my	35	50	0	10	5
daily use.	54	2.00	1.12		
30. The content of this mo-	3	13	1	1	2
dule 2 is not up to	15	65	5	5	10
date.	54	2.30	1.13		
31. The content of this mo-	7	6	0	6	1
dule should be develop	35	30	0	30	5
in the module but not	54	2.40	1.39		
only based on					
bibliographies.					
32. Going through this mo-	14	4	0	1	1
dule 2 it helps me to	70	20	0	5	5
be critical of messages	54	1.55	1.10		
emitted from mass media.					

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
33. Should be more	F.	8	10	0	2	0
audiovisuals program	%.	40	50	0	10	0
based on the content		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
of module 2.	F.	54	1.80	.89		
34. The content of module 2		3	4	0	10	3
is too confused based on		15	20	0	50	15
communication aspects.		54	3.30	1.38		
35. There must be at the end		8	10	0	1	1
of the module a page,		40	50	0	5	5
that a learner can give		54	1.85	1.04		
its opinions.						
36. The consultation has		6	11	1	2	0
been a good reinforcement		30	55	5	10	0
to understand the		54	1.95	.89		
content of this module.						
37. The content of this mo-		5	12	2	1	0
dule is up to date.		25	60	10	5	0
		54	1.95	.76		
38. The content of this mo-		7	10	0	3	0
dule is lear related to		35	50	0	15	0
the different types of		54	1.95	1.0		
message.						

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
39. The vocabulary used in F.	9	7	1	3	0
this module 2 easy to %.	45	35	5	15	0
be understood.					
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
F.	54	1.90	1.07		

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 EXPERIMENTAL "J. M. SISO MARTINEZ"
 CARACAS

Name. _____ I.D. _____

Area Language and Communication

Program n = 20

Instructions

This questionnaire has been compiled to sample your opinion about individualized instructional materials at this Institute.

Indicate how you feel about each of the following statements

by circling your answer on this scale: SA - strongly agree,

A - agree, U - uncertain, D - disagree, SD - strongly disagree.

Please consider each statement carefully before you respond,

and try to avoid using "uncertain (U)".

Thank you!

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
1. When I finish this	F.	9	10	0	1	0
program I will have a	%	45	50	0	5	0
better status in my		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
future.	F.	54	1.70	.92		

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
2. It is my responsibility	F. 13	7	0	0	0
to adapt in this new	% 65	35	0	0	0
system of education.	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 54	1.35	.49		
3. The first meeting with	9	11	0	0	0
the instructors way very	45	55	0	0	0
efective because it	54	1.55	.51		
oriented us on how to					
conduct ourselves					
through this program.					
4. This institute is well	3	7	1	5	4
located in this	15	35	5	25	20
industrial zone.	54	3.00	1.45		
5. Individualized Instruc-	6	14	0	0	0
tion is better than	30	70	0	0	0
traditional education,	54	1.70	.47		
because the students can					
develop their own					
skills.					
6. I had heard that this	8	11	0	1	0
Institute is highly	40	55	0	5	0
innovated.	54	1.70	.73		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
7.	All the learning activities from the modules are appropriated for my future career.	F. 7 35 NR 54	13 65 <u>MEAN</u> 1.65	0 0 <u>SD</u> .49	0 0	0 0
8.	After finishing this program I won't have problems finding a good job.	1 5 54	1 5 3.85	4 20 1.09	8 40	6 30
9.	The individualized instruction help me to acquire more knowledge for my present and future career.	6 30 54	11 70 1.70	0 0 .47	0 0	0 0
10.	This Institute gives information where to find jobs related to this program.	2 10 54	9 45 1.45	3 15 .51	3 15	3 15
11.	This Institute must have extracurricular activities, (e.g. sports, etc.)	14 70 54	6 30 1.30	0 0 .47	0 0	0 0
12.	This Institute offers areas of specialization as good as universities do.	9 45 54	10 50 1.60	1 5 .60	0 0	0 0

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
13. I like the more per-	F.	8	10	0	1	I
sonal atmosphere of	8.	40	50	0	5	5
this Institute.		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F.	54	1.85	1.04		
14. There is less competi-		7	6	0	3	4
tion at this Institute		35	30	0	15	20
so more learning occurs.		54	3.00	1.38		
15. I would recommended		11	9	0	0	0
that a friend take		55	45	0	0	0
courses here.		54	1.45	.51		
16. I.U.P.E. should be the		12	8	0	0	0
leadership for human		60	40	0	0	0
resources in the higher		54	1.40	.50		
level of education, in						
the priorities areas of						
this country.						
17. I prefer the tradition-		1	1	1	12	5
al approach of instruc-		5	5	5	60	25
tion to individualized		54	3.95	1.00		
instruction.						
18. Traditional lectures mo-		1	4	1	11	3
tivates me better than		5	20	5	55	15
Individualized Instruc-		54	3.55	1.15		
tion.						

	SA	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
19. I consider completing	F. 7	12	0	1	0
a course a challenge.	% 35	60	0	5	0
	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F. 54	1.75	.72		
20. It would be better to	6	2	2	6	4
create more universi -	30	10	10	30	20
ties than more Insti-	54	3.00	1.59		
tutes of this type.					
21. I'm in this program be-	0	1	0	9	10
cause I'm waiting to be	0	5	0	45	50
accepted at the Univer-	54	4.40	.75		
sity.					
22. This Institute offers a	8	8	0	3	1
good quality fo audio -	40	40	0	15	5
visual materials (e.g.	54	2.05	1.23		
T.V. studio, Video Cas-					
settes).					
23. The "control of studio"	6	12	1	1	0
of this Institute is	30	60	5	5	0
aware of my achievement	54	1.85	.75		
in this process of					
learning.					

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
24. Seminaries help me to	F.	13	7	0	0	0
adapt in this system.	%	65	35	0	0	0
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	F.	54	1.35	.49		
25. Department of Orientation is always available for the learners.		7	12	0	0	1
		35	60	0	0	5
		54	1.80	.89		
26. The schedule of the audiovisual room is not flexible for the learners.		5	1	0	8	6
		25	5	0	40	30
		54	3.45	1.61		
27. Credits in this program are too long to be covered in a short time.		1	3	1	9	6
		5	15	5	45	30
		54	3.80	1.20		
28. Learners' manuals inform me about the Institute's program.		11	9	0	0	0
		55	45	0	0	0
		54	1.45	.51		
29. Seminars offered in this Institute are not as dynamic as they're supposed to be.		5	12	0	2	1
		25	60	0	10	5
		54	2.10	1.07		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
30.	I thought that this Institute was private.	F. 2	5	0	6	7
		% 10	25	0	30	35
		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
		F. 54	3.55	1.47		
31.	Credits in this program are not overloaded.	0	4	2	8	6
		0	20	10	40	30
		54	3.80	1.11		
32.	This system helps the learner to be an effective professor and be updated educational innovations.	14	5	0	0	1
		70	25	0	0	5
		54	1.45	.95		
33.	This program helps to have more communication between the learner and the instructors.	6	11	1	1	1
		30	55	5	5	5
		54	2.00	1.03		
34.	This program gives good training for educational staff within the careers offered.	8	11	1	0	0
		40	55	5	0	0
		54	1.65	.59		
35.	This Institute doesn't guarantee the equal rights opportunities to enter in this program.	1	2	1	10	6
		5	10	5	5	30
		54	3.90	1.12		

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
36.	This program helps me	F. 6	14	0	0	0
	to be in the educa -	3 30	70	0	0	0
	tional field because of	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
	the areas of learning	F. 54	1.70	.47		
	offered here.					
37.	I remember when I	1	6	1	8	4
	enrolled in this Insti-	5	30	5	40	20
	tute I didn't know where	54	3.40	1.27		
	I was.					
38.	The word "experimental",	2	2	1	9	6
	meant to me that in the	10	10	5	45	30
	future this Institute	54	3.75	1.29		
	will disappear.					
39.	The programs of this	5	12	1	2	0
	Institute helped me to	25	60	5	10	0
	feel integrated as part	54	2.00	.86		
	of this Institute.					
40.	The learning strategies	8	11	0	1	0
	used in this program	40	55	0	5	0
	permit me to be up dated	54	1.70	.73		
	in the innovations of					
	educational field.					

		<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
41. The requirement of	F.	0	1	0	14	5
this learning process	%.	0	5	6	70	25
influenced me nega -		<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
tively to continue in	F.	54	4.15	.67		
this program.						
42. Individualized Instruc-		7	8	1	1	3
tion means that the		35	40	5	5	15
learner is responsible		54	2.25	1.41		
for mastering 100% of						
the objectives.						
43. Individualized Instruc-		1	4	0	10	5
tion demands from the		5	20	0	50	25
learner that the		54	3.70	1.22		
achievement of the						
objectives should be						
mastered only by them-						
selves, without any						
help from the Instruc -						
tors.						
44. If you don't work as a		9	8	1	1	1
teacher, do you think		45	40	5	5	5
that this program will		54	1.85	1.09		
motivate you to look						
for a job in the						
educational field,						

	<u>SA</u>	<u>A</u>	<u>U</u>	<u>DA</u>	<u>SD</u>
45. If you work in teaching, F.	9	9	2	0	0
do you think that after %.	45	45	10	0	0
studying in this Insti-	<u>NR</u>	<u>MEAN</u>	<u>SD</u>		
tute you will work in F.	54	1.65	.67		
the area of learning					
that you had already					
chosen.					
46. This program will give	14	6	0	0	0
me the skills and	70	.30	0	0	0
abilities needed to be	54	1.30	.47		
an effective teacher.					
47. This program helps me	13	7	0	0	0
to acquire the skill	75	35	0	0	0
and habilities to be	54	1.35	.49		
updated, in the edu-					
cational field.					
48. This Institute serves	10	10	0	0	0
the needs of Venezue-	50	50	0	0	0
lan people.	54	1.50	.51		

INFORMATION SHEET

REPUBLICA DE VENEZUELA
MINISTERIO DE EDUCACION
INSTITUTO UNIVERSITARIO PEDAGOGICO
EXPERIMENTAL "J. M. SISO MARTINEZ"

CARACAS

INFORMACION GENERAL

Por favor, conteste las siguientes preguntas concisas y precisas.

Fecha:-----

Nombre:-----C.I.:-----

No. de teléfono: casa:----- trabajo: -----

1.- Sexo: femenino:-----

 masculino: -----

2.- Edad: -----

3.- Estudios realizados:-----

4.- Que tipo de trabajo esta efectuando actualmente:-----

5.- Posee Ud. algún título. De que mención?-----

6.- Ha estudiado alguna vez usando instrucción individualizada?

(especifique)-----

