

STUDENT EVALUATION OF SELECTED ASPECTS  
OF INDIVIDUALIZED COURSES

By

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Scope and Method of Study: The major purpose of the study was to ascertain preferences and dislikes of college students for certain aspects of individualized courses as implemented on the campus of Oklahoma State University. Specific objectives of the research were to identify positive and negative aspects of individualized courses, to identify differences between individualized courses and traditionally taught courses, and to formulate suggestions that instructors can utilize in the educational process. Participants in the study were 64 seniors in the Clothing, Textiles and Merchandising Department at Oklahoma State University. Data were collected by means of a questionnaire on course organization, teaching materials, student-teacher interaction, student requirements, testing and evaluation procedures, and student attitudes. Data were analyzed using percentages.

Findings and Conclusions: Results of the study indicated that the aspects of individualized courses preferred by students were the opportunity for self-pacing and the opportunity to finish early in the semester. The two most predominant dislikes of students in individualized courses were the lack of self-motivation and the lack of help from the instructor. Students indicated that many aspects of individualized courses were no different than in traditional courses. Student suggestions for improvement of individualized courses were varied; there was no dominant suggestion given for the improvement of individualized courses.

ADVISER'S APPROVAL \_\_\_\_\_



STUDENT EVALUATION OF SELECTED ASPECTS  
OF INDIVIDUALIZED COURSES

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## CHAPTER I

### INTRODUCTION

Webster (1971) defined education as

. . . the knowledge and development resulting from an educational process: the field of study that deals mainly with methods of teaching and learning in schools (p. 361).

Milton (1973, p. 10) reported that learning "is an individual, internal, and personal activity; no one person can learn for another."

Howes (1970) stated that human beings are not alike. Their differences are real and must be cultivated and nurtured as an asset within the educational system. A report by Education U.S.A. (1971) supported the fact that it is the right of every individual to acquire an education within the school system in his own way and at his own rate of learning.

Teaching-learning resources available today are almost limitless and more are being developed each year. Reich (1971) reported that students should be exposed to as wide a variety of experiences as possible.

To provide this variety, the effective teacher needs to learn about and use whatever available teaching-learning helps she and her students agree are most appropriate for a particular purpose (Reich, 1971, p. 392).



Individualized instruction, a teaching-learning resource, has been a widely practiced (Allen, Giat, and Cherney, 1974; Education U.S.A., 1971; Gladstein, 1967; Jernstedt, 1976; Johnson and Schatz, 1974) and debated (Silberman, 1970) technique used within the educational system. It has a number of forms and can be implemented in a variety of ways.

Recent research (Armstrong and Pinney, 1977; Brown, 1974; Diamond, Eickmann, Kelley, Halloway, Vickery, and Pascarella, 1975; Fraley and Vargas, 1976; Howes, 1970) has shown advantages and disadvantages with the educational technique of individualized instruction. The majority of these reports indicated an evaluation of the program only from the instructor's or administrator's point of view; however, researchers (Pisarra, 1977; Shell, 1975; Good, 1974; Rounds, 1973; Wilkins, 1971) at Oklahoma State University have reported data concerning student opinions, attitudes, and ideas toward individualized instruction. The researchers indicated a need for further research in this area.

### Purpose

The purpose of the study was to ascertain preferences and dislikes of college students for certain aspects of individualized courses as implemented on the campus of Oklahoma State University. Instructors could utilize this

information to more successfully meet the needs of future students.

Specific objectives of the research were the following:

1. To identify positive aspects of individualized courses.
2. To identify negative aspects of individualized courses.
3. To identify differences between individualized courses and traditionally taught courses.
4. To formulate suggestions that instructors can utilize in the educational process.

#### Definition of Terms

Individualized instructional activities are designed to meet the needs of the individual learner, taking into account each learner's accumulated knowledge, skills, attitudes, potential, and rate of learning. Programmed materials and audio-tutorial instruction are often appropriate for individualized instruction. The Personalized System of Instruction (PSI) and Individually Prescribed Instruction (IPI) are types of individualized instruction.

Independent study allows the student to study what he chooses and to proceed in his own manner. The teacher provides guidance rather than actual participation in learning experiences.

The IPI (Individually Prescribed Instruction) program is a highly structured system of individualized instruction. It is based on a set of clearly specified instructional objectives. The instructional objectives provide the basis for organizing the curriculum, selecting the methods and materials, preparing the various tests, and directing the student's individual study. To demonstrate mastery on each objective and learning unit, the student must obtain a standard score or previously established level of performance (Gronlund, 1974).

An audio-tutorial laboratory is equipped with technological aids such as tape recorders, projectors, audio tapes, and videotapes. When these aids are combined with learning activity units, the student can proceed at his own pace and at a time of his choice (Robl and Anderson, 1974).

Programmed instruction refers to a type of learning experience wherein the student progresses through a carefully planned sequence of material to a desired type of behavior. The materials are designed in such a way that the student responds frequently to stimuli and his or her responses are immediately reinforced through a knowledge of results. The entire sequence of material is referred to as a program (Gould, 1968).

PSI (Personalized System of Instruction) is a prescribed curriculum through which the student may move, from start to finish, at his own pace. The work of the

course is divided into units, and mastery of each is shown by passing a "readiness test." Lectures are used only as motivational tools. The teaching staff consists of a proctor, a classroom assistant, and an instructor. All students must take a final examination at the same time (Keller and Sherman, 1974).

## CHAPTER II

### REVIEW OF LITERATURE

Individualized instruction is receiving increased emphasis and comprehensive systems of individualized instruction have been implemented in hundreds of schools, colleges, and universities. Numerous programs have emerged to meet the demand for greater attention to the needs of individual learners.

Although differences among students in rate of learning have received the major emphasis, attention has been given to individual differences in interest and learning style (Gronlund, 1974, p. iii).

Topics included in the review of literature include the following: individualized instruction, the history of individualized instruction, and evaluation of individualized instruction programs.

#### Individualized Instruction

Gronlund (1974) reported that individualized instruction involves some kind of adaptation in the educational program to fit each student's individual needs to maximize his learning and development. Recent research (Diamond et al., 1975) has shown that:

since students learn at different rates, the instructional program should be flexible enough to allow a student to move through it as rapidly or as slowly as he can in order to reach the established goals (p. 64).

Armstrong and Pinney (1977) reported that individualized instruction promotes individualized learning by a conscientious attempt to match the student's learning experiences to his or her unique blend of personality, learning style, and present level of accomplishment. Howes (1970) viewed the individualization of instruction as a teaching strategy which placed trust in the learner and allowed the student to expend his own energy for the purpose of learning.

Teaching for mastery is an ideal of individualized instruction which is frequently attained (Johnson and Schatz, 1974). Mastery, in part, is achieved because of the common and almost standard elements that comprise individualized instruction. Gagne (1974) stated that these elements pertain primarily to the matter of how the instructional events are presented in individualized instruction as compared to conventional instruction:

1. The teacher provides fewer of the instructional events.
2. The materials provide more of the instructional events.
3. There is more opportunity for variations among learners in what to learn, how to learn, and which material to use for learning.

Howes (1970) reported that nurturance of individual development is a dominant characteristic of individualized instruction. Instruction of this type should give autonomy to the learner, encouraging him to be self-directed, self-disciplined, and self-responsible. Conscious decision making based on appropriate information and knowledge is also a primary goal of individualized instruction.

The teacher's role in individualized instruction is modified.

The teacher moves away from being a transmitter of knowledge toward behaving as a responder controlled by the pupil. The teacher moves away from being the initiator-developer toward being a contributor reactor. The teacher moves away from being a program director toward a co-designer-assister (Howes, 1970, pp. 77-78).

Careful, systematic planning is an extremely important aspect of the teacher's new modified role. Armstrong and Pinney (1977) stated that within the individualized instruction program a plan should provide information that will promote sound decision making in the following: division of subject matter into manageable learning segments, identification of diagnostic procedures, preparation of learning options, establishment of appropriate levels of task performance, development of subject matter tests, and identification of procedures for reporting the learner's progress.

## History of Individualized Instruction

In 1869, Harvard pioneered the implementation of an elective system which for the first time allowed students to have a small choice in their educational materials. The acceptance of this program was so great that the elective plan spread throughout the United States, eliminating some of the restrictive and stifling aspects of education.

St. Vincent's College, in Pennsylvania, required an independent study program of all students matriculated in 1870. Students at Stanford in 1891 were permitted to study their chosen field with a chosen teacher. At this time in Stanford's history, it was the primary aim of all independent study to stimulate the superior student to do more and better work than ordinarily would be done without individual supervision (Robinson, 1937).

The growth and utilization of independent study programs was evident in a number of college curriculums prior to 1920. These included a preceptorial system at Princeton in 1905, an independent study program at Reed College which began in 1911, a tutorial program at Harvard in 1912, and an independent study program in 1913 at Rice Institute.

The decade of 1920 was a time of change and growth within the American educational system. "Historically, this is the period of the burgeoning of independent study as a common practice in undergraduate university education"



(Brown, 1968, p. 21). Independent study in undergraduate divisions of American colleges and universities began to make headway. The independent study program became the exclusive privilege of the able student. Seventy-five colleges at this time had some type of plan for individualized instruction.

In 1921, Swathmore became the pacesetter and was "universally regarded as the most influential of the early college independent study programs" (Brown, 1968, p. 21). The philosophy was to bring the best student up to the highest standard that could be reached; average was not good enough and was considered a waste. Independent study at Swathmore was implemented by giving students greater independence in their work and less frequent but more comprehensive tests.

Another program which implemented independent study and individualized instruction was the Oxford Tutorial where a degree was granted after a series of examinations and a minimal term of residence. No courses were required and the student received extreme personal attention from a tutor.

Faculty at Antioch College highly encouraged the students, regardless of level, to do independent study work. Their philosophy was thus stated:

There can be no argument that the single most important contribution which a school or college can make to its students is to develop in the capacity to continue learning throughout their lives (Brown, 1968, p. 29).

Independent study continued to be nurtured within numerous colleges and universities throughout the United States. During the 1940's teaching strategies again began to focus heavily on the individual and his method of learning. Howes (1970) reported:

Three efforts which have added power and impetus to the search for meaning of individualization of instruction have been the curriculum reform movement, the development of technology adaptable to education, and concern for the disadvantaged pupil and the concomitant desegregation moves (p. 69).

At the time of World War II individual differences were recognized and innovative instructional strategies were emphasized. Teaching machines and computers allowed students to progress at their own pace through the use of programmed instruction. In an effort to reach the individual student, individualized instruction, or a system of instruction which fits each learner, or the educational task to be accomplished came to the fore.

The 1960's proved to be the advent of numerous innovative educational techniques and resources that would be widely used and debated within the educational system. Among these newer teacher-learning resources which supplemented independent study and individualized instruction were audio-tutorial instruction, PSI, programmed instruction, and IPI.

Wilson and Armstrong (1973, p. 524) reported that independent study in the 1960's was "the study chosen by an individual because he wants to pursue it, and in any manner

he desires." Independent study was advocated for all students, not just the gifted as was often the case previously.

Postlethwait designed an audio-tutorial format of instruction in 1961 (Short, 1973). This technique enhanced learning for mastery and facilitated individual pacing. Opportunities were provided for the utilization of several senses in the learning process, and assistance was always available.

PSI was developed by two Brazilian and two American psychologists in 1963. It was first implemented into the college curriculum in 1964 at Brasilia and the following year at Arizona State University. Today it is used and tested in a number of educational programs in the United States. Characteristics of a PSI program as prescribed by Keller (1972, p. 10) are as follows: the breakdown of course material into units, study questions and objectives as a part of each unit, each student progresses at his own pace, a readiness test is taken for each unit to designate mastery of the information, lectures and demonstrations are used only to inspire, and proctors grade tests on a one-to-one basis. "PSI is an answer to the problem of effective education within a democratic system" (Keller, 1972, p. 10).

Gould (1968) reported that programmed instruction originated in the laboratory of Dr. Sidney L. Pressey, an experimental psychologist. In 1924 he invented a small testing machine which would score a multiple choice examination automatically at the time the answer button was pushed.

Pressey perceived that by making a small change in the machine it could be used as a teaching device to eliminate some of the routine drill of teaching. With this in mind, Pressey developed the first teaching machine (Glaser, 1960). Development of this machine was expanded until today programmed instruction is available in many forms such as booklets, slides, tape recorders, and various types of computer programs.

The IPI project began in 1963 as a theoretical mathematics program at the University of Pittsburgh's Learning Research and Development Center (Education U.S.A., 1975). Today it is a highly structured system of individualized instruction. The curriculum consists of specific behavioral objectives which are grouped into content area units. Mastery is demonstrated upon completion of a unit test. Gronlund (1974) reported that the IPI system is used by more than 300 schools in the United States and

The wide adoption is a result, at least in part, of the use of demonstration schools and other special efforts by the Research for Better Schools to obtain widespread implementation of the IPI Program (p. 21).

Participating schools feed back information to continually improve and modify the program.

#### Evaluation of Individualized Instruction

Evaluation of any instructional program or learning experience is essential if it is to be improved upon and

modified for new audiences. The case does not change with the individualized instruction program. Lewis (1971, p. 117) reported that evaluation is an essential, integral, and ongoing part of individualized instruction. "It enables the students and teachers to know how much progress has been made and what can be done to improve performance."

Fraley and Vargas (1976) noted that a critical factor in evaluation of an instructional system was the amount of behavior change in the learner. Lewis (1971) also stated that it was important to determine whether the student had achieved the desired behavior within the prescribed minimum standard as specified by the behavioral objectives.

Lewis (1971) stated that evaluation of an individualized instruction program should indicate student growth, be related to the behavioral objectives, be a continuous process, and consist of a number of different strategies. No single evaluation strategy should be considered "best."

Numerous reports and research projects have recently been concerned with the evaluation of individualized instruction programs. A variety of hypotheses have been tested and analyzed. Results are both positive and negative.

Fernald and DuNann (1975) tested three hypotheses concerned with the effects of a modified form of individualized instruction. The results revealed that individualized instruction is of no more benefit to low- than to high-achieving students and students are more accurate in evaluating their mastery of course material than students

receiving conventional instruction. Self-report and examination performance data indicated that improvement was not maintained under conventional instruction.

Jernstedt (1976) found that students viewed their individualized instruction course more favorably than students under traditional instruction. The students reported the course to produce more learning, to be more work, to be more flexible, to be equal in difficulty, and to be more accurate in grading than students in the traditional section reported it to be. Jernstedt (1976) further indicated,

Individualized instruction produces superior performance to traditional instruction only when the unit completion activities of the individualized section are similar to the behaviors required on the examination instruments (p. 211).

Recent research (Mueller, 1974, p. 53) has shown that "students in the self-instructional section achieved as well as did students in lecture-discussion sections on the unit examination." Most students completed the self-instructional exercises and were very satisfied with the self-instructional experience and materials. Factors most predictive of performance in the self-instructional section were verbal aptitude, grade point average, number of completed homework assignments, major, and previous courses.

Recent research (Osborn and Osborn, 1975, p. 197) indicated that evaluation of individualized instruction is necessary. "Each student, in light of where he is and where

he wants to go, needs personalized instruction to meet his individual needs if it is to be said he learned well." A method of helping a student to learn is by offering a learning mode appropriate to his style of learning. It is also beneficial to encourage a positive attitude toward what students learn and the conditions under which learning occurs.

One researcher (Robinson, 1937) found that students in independent study achieved rapid growth, greater intellectual maturity, more sustained interest, and an acute awareness of significance of the subject. They also developed greater skill in time management, effort, and materials of study.

Petrequin (1968, p. 175) reported that in independent study in a modular flexible program, the student determined learning activities according to his unique requirements. "In short, the Stanford study indicates a much more effective use of teacher and student time under modular programming in terms of accepted laws of learning." Local studies and investigations of this program revealed no significant difference from traditional methods in student grades and the number of dropouts. The students had more favorable attitudes and commitment to learning in the modular program. Graduates in universities indicated that they had been given better preparation for college as compared to students from traditional high schools. There was a positive reaction to the new design and evidence indicating progress

toward realization of goals. Two surveys indicated that 89 percent of the students favored the modular, flexible program with an emphasis on individualized instruction.

In a recent article (Moore, 1976) it was stated that a resource based approach to learning is a viable alternative to traditional labor intensive approaches. This approach improved opportunities for study and practice and allowed flexibility in student attendance. Video-taped lessons, workbooks, television, and class meetings were instructional materials and methods utilized in this program.

In a recent article (Fisher and MacWhinney, 1976, p. 253) audio-tutorial instruction was reported to be a beneficial supplement to individualized instruction. The audio-tutorial instruction was considered to be highly beneficial in courses with high fact and principle content and for instruction of special skills. The use of a discussion section and the availability of indirect instruction were also positive aspects of audio-tutorial instruction.

Performance in self-paced PSI courses was evaluated by Powers and Edwards (1974). Their results indicated the following: the earlier a student started the course, the more quickly he finished; students who withdrew did so after completing one of the first three exams; and earlier finishers had a slightly more favorable attitude toward the class than late finishers.



A major implication of this study is that students should be reinforced for starting to work early in a self-paced class since starting early maximizes the probability that the student will complete the course (p. 60).

Keller (1972) listed reactions to the programmed system of personalized instruction. In comparison to students in lecture/laboratory classes, persons in the programmed system achieved greater mastery of work assignments, had as much or more memorization of details, had a greater feeling of achievement, felt greater recognition as an individual, and enjoyed the course to a greater extent. As the course progressed,

there was an improvement in study habits, increased confidence in ability to master assignments, an increase in the desire to hear lectures, and a positive change in attitude toward test taking (p. 6).

Research concerned with student opinions, attitudes, and ideas toward individualized instruction has been conducted in the Clothing, Textiles and Merchandising Department at Oklahoma State University. Wilkins (1971, p. 26) reported that students in a basic clothing selection course preferred computer written tests and preferred marking their responses directly on the test rather than on a separate answer sheet. "The major complaint about the test was that long computer pages were difficult to handle."

A study conducted by Rounds (1973, p. 34) at Oklahoma State University revealed that a "self-instructional learning packet is a device which can help students develop skill in clothing construction." Students liked using the

packets; however, students did indicate the need for other devices to provide for student differences.

Good (1974, p. 34) reported that students preferred computer-generated testing because it was easy to read and their scores were immediately available at the end of the examination. Students indicated a preference for the light pen to the keyboard for responding to test items. "In addition, many students indicated that it was faster to take the computer-generated test than the paper-and-pencil test."

Shell (1975) developed and evaluated a tutorial computer-assisted instructional unit for use in the course Profitable Merchandising Analysis. Results indicated that a high percentage of students liked the computer-assisted instructional unit. Suggestions for improvement of the unit included the request for additional problems to work on the computer.

Pisarra (1977, p. 36) conducted research "to evaluate the effectiveness of Fashion in the Sixties, an interdisciplinary, independent study module for the course History and Social Change." The module appealed to a variety of persons from several disciplines and both sexes. Students were satisfied with the text materials of the module but were dissatisfied with the examination questions.

### Summary

Individualized instruction is an educational teaching

technique that is widely practiced at all levels of the educational system today. It has been greatly enhanced, modified, and debated. Individualized instruction, like all educational tools, has numerous advantages and disadvantages. It is the teacher's responsibility to use the best method of instruction to promote learning among the students.

## CHAPTER III

### METHOD AND PROCEDURE

The purpose of the study was to ascertain preferences and dislikes of college students for individualized courses as implemented on the campus of Oklahoma State University. To accomplish this objective, data were collected by means of a questionnaire (Appendix A).

#### Description of Sample

Participants in the study were college seniors majoring in clothing, textiles and merchandising at Oklahoma State University during the spring semester, 1978. Sixty-four questionnaires were distributed and used for this study.

#### Description of Instrument

A questionnaire was developed to identify positive and negative aspects of individualized instruction, to identify differences between individualized instruction and traditionally taught courses, and to formulate suggestions that instructors can utilize in the educational process to satisfy the needs of the students. The

questionnaire statements were based on findings from selected materials and research cited in the review of literature.

The questionnaire was pilot tested among students, graduate students, and instructors. Suggestions from each of these participants were utilized; however, the only changes made were for clarity of the statements.

The questionnaire was organized into the following sections:

1. Identification of positive and negative aspects of individualized courses.
2. Identification of differences between individualized instruction and traditionally taught courses.

For data analysis statements on the questionnaire were grouped into categories pertaining to course organization (questionnaire statements 1, 2, 3, 4, 5, 6, 7, 8, 21, and 22); teaching materials (questionnaire statements 10, 11, 12, and 13); student-teacher interaction (questionnaire statements 14, 23, and 24); student requirements (questionnaire statements 15, 16, 25, 26, 27, 28, and 29); testing and evaluation procedures (questionnaire statements 17, 18, 19, 20, and 30); and student attitudes (questionnaire statements 9, 31, 32, 33, 34, 35, and 36).

The data were analyzed by the use of percentages. Suggestions that instructors can utilize in the educational process were formulated.

### Collection of Data

The questionnaires were given to seniors majoring in clothing, textiles and merchandising between March 29 and April 19, 1978. The researcher explained and presented the questionnaire to the students individually in classes or in living units. A total of 64 questionnaires were distributed and returned.

## CHAPTER IV

### ANALYSIS OF DATA

A questionnaire (Appendix A) was developed to obtain information concerning preferences and dislikes of college students for specific aspects of individualized courses. Data were obtained from 64 seniors majoring in clothing, textiles and merchandising at Oklahoma State University during the spring semester, 1978. The questionnaire included items regarding the following: course organization, teaching materials, student-teacher interaction, student requirements, testing and evaluation procedures, and student attitudes.

#### Background of the Participants

The number of courses participants had taken by individualized instruction is presented in Table I. Approximately one-third (31.3%) of the students had taken two individualized courses, 17 (26.6%) students had taken three individualized courses, 13 (20.3%) students had taken five individualized courses, 11 (17.2%) students had taken four individualized courses, and three (4.7%) students had taken only one course through individualized instruction.

TABLE I  
 NUMBER OF COURSES PARTICIPANTS HAD TAKEN  
 BY INDIVIDUALIZED INSTRUCTION  
 (N=64)

Number	N	%
One	3	4.7
Two	20	31.3
Three	17	26.6
Four	11	17.2
Five	13	20.3

Specific courses taken by individualized instruction are presented in Table II. All sixty-four participants had taken at least one individualized course in the Clothing, Textiles and Merchandising Department. Most (84.4%) of the students had taken Clothing in the Environment; three-fourths (75.0%) of the students had taken Profitable Merchandising Analysis. More than half of the students had taken Textiles for Consumers and Basic Clothing Construction. Many of the students had also taken courses through individualized instruction in other departments of the College of Home Economics and in other colleges in the university.



TABLE II  
 INDIVIDUALIZED COURSES TAKEN  
 BY PARTICIPANTS  
 (N=64)

Course	N	%
Clothing in the Environment	54	84.4
Profitable Merchandising Analysis	48	75.0
Textiles for Consumers	38	59.4
Basic Clothing Construction	33	51.6
History and Social Change	7	10.9
Child and Family Development	4	6.3
Elementary Astronomy	4	6.3
Introductory Psychology	4	6.3
Production Typing	3	4.7
Basic Human Nutrition	1	1.6
Resource Management for Individual and Family	1	1.6
General Geology	1	1.6
Principles of Horticulture and Landscaping Design	1	1.6
College Algebra	1	1.6
The School in American Society	1	1.6
The Use of Libraries/Learning Resource Centers	1	1.6

## Organization of the Course

Student responses concerning organization of individualized courses are indicated in Table III. Approximately two-thirds (64.1%) of the participants indicated that the infrequent use of lectures was a positive aspect of individualized courses. Approximately one-fourth (23.4%) of the students reported this to be a negative aspect of individualized courses. The opportunity to finish the course before the end of the semester was checked by the majority of the students (93.8%) as a positive aspect of individualized courses.

Student opinions concerning the use of discussion sections were varied. Twenty-seven students (42.4%) felt that discussion sections were a positive aspect, 21 students (32.8%) felt that discussion sections were a negative aspect, and 11 students (17.2%) were undecided. Less instruction presented by the teacher was denoted to be a negative aspect of individualized courses by 30 (46.9%) of the participants. Twenty (31.3%) other students, however, indicated this to be a positive aspect of individualized courses.

The majority of the students (89.1%) indicated that the division of subject matter into small learning units was a positive aspect of individualized courses. The use of study questions and objectives as a part of each unit

TABLE III  
 RESPONSES OF PARTICIPANTS REGARDING  
 ORGANIZATION OF INDIVIDUALIZED  
 COURSES  
 (N=64)

Variable	N	% <sup>a</sup>
The infrequent use of lectures		
Positive aspect	41	64.1
Negative aspect	15	23.4
Does not apply	2	3.1
Undecided	6	9.4
The opportunity to finish the course before the end of the semester		
Positive aspect	60	93.8
Negative aspect	2	3.1
Does not apply	1	1.6
Undecided	1	1.6
The use of discussion sections		
Positive aspect	27	42.2
Negative aspect	21	32.8
Does not apply	5	7.8
Undecided	11	17.2
Less instruction presented by the teacher		
Positive aspect	20	31.3
Negative aspect	30	46.9
Does not apply	5	7.8
Undecided	9	14.1
The division of subject matter into small learning units		
Positive aspect	57	89.1
Negative aspect	3	4.7
Does not apply	3	4.7
Undecided	1	1.6

TABLE III (Continued)

Variable	N	% <sup>a</sup>
Study questions and objectives as a part of each unit		
Positive aspect	56	87.5
Negative aspect	1	1.6
Does not apply	5	7.8
Undecided	2	3.1
Flexibility in the time you choose to study (morning, afternoon, weekends)		
Positive aspect	57	89.1
Negative aspect	2	3.1
Does not apply	3	4.7
Undecided	2	3.1
The opportunity to progress at your own rate in completing assignments, units		
Positive aspect	61	95.3
Negative aspect	1	1.6
Does not apply	0	0.0
Undecided	2	3.1
The opportunity for self-evaluation (access to answers of problems of study questions)		
Positive aspect	58	90.6
Negative aspect	2	3.1
Does not apply	1	1.6
Undecided	3	4.7
Flexibility in class attendance in individualized courses is		
Much less than in traditional courses	7	10.9
Less than in traditional courses	8	12.5
No different than in traditional courses	3	4.7
Greater than in traditional courses	10	15.6
Much greater than in traditional courses	36	56.3

<sup>a</sup>Does not always equal 100% due to rounding.

was also considered a positive aspect of individualized courses by the majority of the students (87.5%).

Flexibility in the time one chooses to study (morning, afternoon, night, weekends) was identified as a positive aspect of individualized courses by 57 (89.1%) of the students. Sixty-one (95.3%) of the students indicated that the opportunity to progress at one's own rate in completing assignments was a positive aspect of individualized courses.

The opportunity for self-evaluation was indicated by a large proportion of the participants (90.6%) to be a positive aspect of individualized courses. Almost three-fourths of the students (71.9%) indicated that flexibility in class attendance in individualized courses is greater or much greater than in traditional courses.

#### Teaching Materials

Information pertaining to teaching materials in individualized courses is presented in Table IV. More than half (53.1%) of the students stated that having instruction provided through resources such as the library, museums, printed materials, and audio-visual materials was a positive aspect of individualized courses; however, about one-fourth (26.6%) of the students indicated that this was a negative aspect.

TABLE IV  
 RESPONSES OF PARTICIPANTS REGARDING  
 TEACHING MATERIALS IN INDIVIDUAL-  
 IZED COURSES  
 (N=64)

Variable	N	%
More instruction provided through resources such as the library, museum, printed materials, and audio-visual materials		
Positive aspect	34	53.1
Negative aspect	17	26.6
Does not apply	5	7.8
Undecided	8	12.5
The opportunity to use the computer		
Positive aspect	23	35.9
Negative aspect	10	15.6
Does not apply	27	42.2
Undecided	4	6.3
The use of audio-tutorial instruction		
Positive aspect	30	46.9
Negative aspect	18	28.1
Does not apply	9	14.1
Undecided	7	10.9
The use of programmed instruction		
Postitive aspect	32	50.0
Negative aspect	15	23.4
Does not apply	11	17.2
Undecided	6	9.4

Most of the students (42.4%) had had no opportunity to use the computer; however, twenty-three (35.9%) designated it as a positive aspect of individualized instruction.

Utilization of audio-tutorial instruction was reported by almost half of the students (46.9%) as a positive aspect of individualized courses. About one-fourth of the students (28.1%) reported this to be a negative aspect of individualized courses.

Half of the participants in the study indicated the use of programmed instruction to be a positive aspect of individualized courses while 15 (23.4%) of the participants regarded this to be a negative aspect.

#### Student-Teacher Interaction

Participant responses in regard to student-teacher interaction are shown in Table V. The majority (68.8%) of the students indicated that the opportunity to work with the teacher on a one-to-one basis or in small groups was a positive aspect of individualized courses; however, three-fourths of the students indicated that the amount of student-teacher interaction in individualized courses is less or much less than in traditional courses. Fifty percent of the students indicated that the recognition they received as a student by the teacher was less than or much less than in traditionally taught courses.

#### Student Requirements

Responses related to student requirements in individualized courses are presented in Table VI. A large number

TABLE V  
 RESPONSES OF PARTICIPANTS REGARDING  
 STUDENT-TEACHER INTERACTION IN  
 INDIVIDUALIZED COURSES  
 (N=64)

Variable	N	% <sup>a</sup>
The opportunity to work with the teacher on a one-to-one basis or in small groups		
Positive aspect	44	68.8
Negative aspect	5	7.8
Does not apply	9	14.1
Undecided	6	9.4
The amount of student-teacher interaction in individualized courses is		
Much Less than in traditional courses	25	39.1
Less than in traditional courses	23	35.9
No Different than in traditional courses	7	10.9
Greater than in traditional courses	7	10.9
Much Greater than in traditional courses	2	3.1
Teacher recognition of the student as an individual in individualized courses is		
Much Less than in traditional courses	13	20.3
Less than in traditional courses	19	29.7
No Different than in traditional courses	18	28.1
Greater than in traditional courses	9	14.1
Much Greater than in traditional courses	5	7.8

<sup>a</sup>Does not always equal 100% due to rounding.



of students (85.9%) indicated that a positive aspect of individualized courses was the opportunity to know exactly what was required for an A, B, C, or D. Another positive aspect of individualized courses as indicated by 81.3 percent of the students was the ability to choose among learning or evaluation activities.

When comparing student requirements in individualized courses with those in traditionally taught courses, most of the students indicated that the work load (50.0%), the level of difficulty (46.9%), the clarity of requirements (37.5%), and the amount of memorization required (45.3%) in individualized courses was no different than in traditional courses. Other students indicated that the work load (40.6%), the level of difficulty (37.5%), the clarity of requirements (32.8%), and the amount of memorization required (29.7%) in individualized courses was greater than in traditional courses. Student responses in regard to the choice of activities in individualized courses varied greatly; there was no dominant opinion.

#### Testing and Evaluation Procedures

The participants were questioned about their opinions and ideas concerning testing and evaluation procedures currently used in individualized courses. Their responses are shown in Table VII.

TABLE VI

RESPONSES OF PARTICIPANTS REGARDING  
STUDENT REQUIREMENTS IN INDI-  
VIDUALIZED COURSES  
(N=64)

Variable	N	% <sup>a</sup>
The opportunity to know exactly what is required for an A, B, C, or D		
Positive aspect	55	85.9
Negative aspect	4	6.3
Does not apply	2	3.1
Undecided	3	4.7
The ability to choose among learning or evaluation activities		
Positive aspect	52	81.3
Negative aspect	2	3.1
Does not apply	7	10.9
Undecided	3	4.7
The work load in individualized courses is		
Much Less than in traditional courses	0	0.0
Less than in traditional courses	4	6.3
No Different than in traditional courses	32	50.0
Greater than in traditional courses	26	40.6
Much Greater than in traditional courses	2	3.1
Choice of activities in individualized courses is		
Much Less than in traditional courses	9	14.1
Less than in traditional courses	13	20.3
No Different than in traditional courses	20	31.3
Greater than in traditional courses	17	26.6
Much Greater than in traditional courses	5	7.8

TABLE VI (Continued)

Variable	N	% <sup>a</sup>
The level of difficulty in individualized courses is		
Much Less than in traditional courses	0	0.0
Less than in traditional courses	7	10.9
No Different than in traditional courses	30	46.9
Greater than in traditional courses	24	37.5
Much Greater than in traditional courses	3	4.7
The clarity of requirements in individualized courses is		
Much Less than in traditional courses	4	6.3
Less than in traditional courses	11	17.2
No Different than in traditional courses	24	37.5
Greater than in traditional courses	21	32.8
Much Greater than in traditional courses	4	6.3
The amount of memorization required in individualized courses is		
Much Less than in traditional courses	3	4.7
Less than in traditional courses	4	6.3
No Different than in traditional courses	29	45.3
Greater than in traditional courses	19	29.7
Much Greater than in traditional courses	9	14.1

<sup>a</sup>Does not always equal 100% due to rounding.

TABLE VII  
 RESPONSES OF PARTICIPANTS REGARDING  
 TESTING AND EVALUATION PROCEDURES  
 IN INDIVIDUALIZED COURSES  
 (N=64)

Variable	N	% <sup>a</sup>
Tests based on specified objectives		
Positive aspect	58	90.6
Negative aspect	2	3.1
Does not apply	2	3.1
Undecided	2	3.1
The opportunity to know your progress at any time		
Positive aspect	60	93.8
Negative aspect	2	3.1
Does not apply	1	1.6
Undecided	1	1.6
The opportunity to repeat tests on which you made low grades		
Positive aspect	58	90.6
Negative aspect	1	1.6
Does not apply	3	4.7
Undecided	2	3.1
The opportunity to discuss test results with an instructor or assistant		
Positive aspect	51	79.7
Negative aspect	8	12.5
Does not apply	4	6.3
Undecided	1	1.6
Fairness in grading in individualized courses is		
Much Less than in traditional courses	2	3.1
Less than in traditional courses	10	15.6
No Different than in traditional courses	39	60.9
Greater than in traditional courses		
Much Greater than in traditional courses		

<sup>a</sup>Does not always equal 100% due to rounding.

More than three-fourths of the students indicated that the following statements regarding testing and evaluation procedures were positive aspects of individualized courses: the opportunity to know one's progress at any time (93.8%), tests based on specific objectives (90.6%), the opportunity to repeat tests on which one made low grades (90.6%), and the opportunity to discuss test results with the instructor or an assistant (79.7%).

Student opinions on fairness in grading in individualized courses varied. Thirty-nine students (60.9%) stated that there was no difference and 12 students (18.8%) indicated that in individualized courses fairness in grading was greater than in traditional courses. Ten students (15.6%) felt that fairness in grading in individualized courses was less than in traditional courses.

#### Student Attitudes

The identification of differences between individualized courses and traditionally taught courses regarding student attitudes are presented in Table VIII. Twenty-seven participants (42.2%) indicated that the amount of learning in individualized courses was greater. Twenty-three participants (35.9%) indicated that the amount of learning which takes place in individualized courses is no different from that in traditional courses.

TABLE VIII  
 RESPONSES OF PARTICIPANTS REGARDING  
 STUDENT ATTITUDES TOWARD INDI-  
 VIDUALIZED COURSES  
 (N=64)

Variable	N	% <sup>a</sup>
The amount of learning which takes place in individualized courses is		
Much Less than in traditional courses	1	1.6
Less than in traditional courses	11	17.2
No Different than in traditional courses	23	35.9
Greater than in traditional courses	27	42.2
Much Greater than in traditional courses	2	3.1
Improvement of study habits through individualized courses is		
Much Less than in traditional courses	3	4.7
Less than in traditional courses	7	10.9
No Different than in traditional courses	16	25.0
Greater than in traditional courses	29	45.3
Much Greater than in traditional courses	9	14.1
The amount of sustained interest in courses which are individualized is		
Much Less than in traditional courses	2	3.1
Less than in traditional courses	12	18.8
No Different than in traditional courses	23	35.9
Greater than in traditional courses	23	35.9
Much Greater than in traditional courses	4	6.3

TABLE VIII (Continued)

Variable	N	% <sup>a</sup>
The amount of motivation provided in individualized courses is		
Much Less than in traditional courses	4	6.3
Less than in traditional courses	20	31.3
No Different than in traditional courses	13	20.3
Greater than in traditional courses	23	35.9
Much Greater than in traditional courses	4	6.3
One's confidence in ability to master assignments in individualized courses is		
Much Less than in traditional courses	0	0.0
Less than in traditional courses	10	15.6
No Different than in traditional courses	18	28.1
Greater than in traditional courses	32	50.0
Much Greater than in traditional courses	4	6.3
Feeling of achievement in individualized courses is		
Much Less than in traditional courses	0	0.0
Less than in traditional courses	2	3.1
No Different than in traditional courses	17	26.6
Greater than in traditional courses	33	51.6
Much Greater than in traditional courses	12	18.8
The opportunity for greater independence in work		
Positive aspect	57	89.1
Negative aspect	4	6.3
Does not apply	1	1.6
Undecided	2	3.1

<sup>a</sup>Does not always equal 100% due to rounding.

Almost half (45.3%) of the students reported improvement of study habits through individualized courses; however, one-fourth of the students indicated that there was no improvement of study habits in individualized courses. The amount of sustained interest in individualized courses was no different according to 23 students (35.9%), but another 23 students (35.9%) indicated that it was greater. Student responses were varied concerning the amount of motivation provided in individualized courses.

Fifty percent of the students indicated that their confidence in ability to master assignments in individualized courses was greater than in traditionally taught courses. More than half of the students (51.6%) indicated a greater feeling of achievement in individualized courses; however, 17 students (26.6%) indicated that there was no difference in achievement in individualized courses in comparison with traditional courses. The majority of the students (89.1%) indicated that the opportunity for greater independence in work was a positive aspect of individualized courses.

#### Positive and Negative Aspects of Individualized Courses

Approximately two-thirds of the students indicated the following to be positive aspects of individualized instruction: the infrequent use of lectures, the opportunity



to finish the course before the end of the semester, the division of subject matter into small learning units, study questions and objectives as a part of each unit, flexibility in the time one chooses to study, the opportunity to progress at one's own rate in completing assignments, the opportunity for greater independence in work, the opportunity to work with the teacher on a one-to-one basis, the opportunity to know exactly what is required for a grade, and the ability to choose among learning or evaluation activities. All of the testing and evaluation procedures used in individualized instruction were identified as positive aspects of individualized courses. More than one-third considered instruction provided through the library and museums, the computer, audio-tutorial materials, and programmed materials as positive aspects of individualized courses.

No aspect of individualized instruction was considered to be negative by more than half of the students; however, almost half of the students did indicate that the small amount of instruction provided by the instructor was a negative aspect of individualized courses. Other aspects that approximately one-fourth of the students considered to be negative included the following: necessity to delegate personal study time, the lack of self-motivation, the lack of communication concerning tests and requirements, and difficulty in getting help on assignments.

## Relationship Between Individualized Courses and Traditionally Taught Courses

Aspects of individualized courses were rated in relation to traditionally taught courses. Flexibility in attendance in individualized courses was considered to be much greater than in traditional courses. The amount of student-teacher interaction and the teacher's recognition of the student in individualized courses was reported to be less than in traditional courses.

When comparing student requirements in individualized courses with those in traditionally taught courses, more than one-third of the students indicated that the work load, the level of difficulty, the clarity of requirements, the amount of memorization required, and fairness in grading in individualized courses was no different from traditional courses.

The amount of motivation provided in individualized courses varied with the individual; there was no dominant opinion. More than half of the students felt that their confidence in ability to master assignments and the feeling of achievement in individualized courses was greater than in traditional courses.

## Aspects Students Liked and Disliked About Individualized Courses

In an open-ended question students were asked to list

what they liked and disliked about individualized courses. Students' comments regarding what they liked and disliked are presented in Appendix B and Appendix C. Aspects that many students liked about individualized courses were the following: self-pacing, flexibility in class attendance, the opportunity to finish early, the freedom to choose one's own time to study, the opportunity to repeat tests, and the opportunity to take tests when one chooses.

When students were asked what they disliked about individualized courses, more than one student suggested one of the following: the necessity to delegate personal study time, the excessive work load, the difficulty in meeting deadlines, the lack of communication concerning tests and requirements, the difficulty in getting help when needed, the high number of tests, the smaller amount of learning, the large size of units, the difficulty in self-motivation, and a lack of help from the instructor.

Students also indicated their dislike for the following: the quantity of subject matter covered in a small amount of time, the lack of discussion on the material, no opportunity to work with others, and having to do work in the library, audio-tutorial laboratory, or other designated place.

#### Suggestions for Improvement of Individualized Courses

In an open-ended question students were asked to list

ways in which individualized courses might be improved. Student responses to this question and ideas obtained from the reactions to the questionnaire statements formed the basis for suggestions for improvement of individualized courses.

#### Student Suggestions to Improve Individualized Courses

Student suggestions to improve individualized courses are presented in Appendix D. No dominant suggestion was given for the improvement of individualized courses. Suggested ways in which individualized courses might be improved included the following: a larger variety of learning materials, fewer tests, tests made available to be reviewed, more teacher assistance, more help sessions, better manuals, clearer assignments, optional references, more explicit examples in the learning materials, and the opportunity to take tests more frequently.

#### Suggested Ways to Improve Individualized Courses

Based on student suggestions and data from the study, the following are suggestions that instructors can utilize to improve individualized courses. The organization of the course should provide the opportunity for students to progress at their own rate in completing assignments and to finish the course before the end of the term if all work

has been successfully completed. Learning materials should be divided into units with specific objectives for each unit, study questions, a variety of learning activities, optional or additional references, and explicit examples to clarify information provided in the teaching materials. Testing and evaluation procedures should encourage the student to be aware of his progress in the course at any time, to feel free to discuss materials and tests with the instructor, and to repeat tests on which he made low grades. The instructor should make an effort to experiment with different modes of teaching such as discussion sections, the computer, and programmed materials to determine which method of instruction best promotes the attainment of the course objectives among students. Innovative ways to motivate the student should be identified and implemented by the teacher in individualized courses.

#### Choice of Individualized Courses

Forty-seven students (73.3%) responded favorably when asked if they would select another course by individualized instruction. Four of the participants (6.1%) indicated that it would depend on the course; nine of the students (14.1%) would not choose to take another course by individualized instruction, as indicated in Table IX.

TABLE IX  
CHOICE FOR INDIVIDUALIZED COURSES  
(N=64)

Variable	N	%
If you had a choice, would you select another course by individualized instruction?		
Yes	47	73.4
No	9	14.1
Depends on the course	4	6.3
No response	4	6.3

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of the study was to ascertain likes and dislikes of college students for certain aspects of individualized courses as implemented on the campus of Oklahoma State University. Data were collected through the use of a questionnaire which 64 seniors in the Clothing, Textiles and Merchandising Department completed between March 29 and April 19, 1978. Data were tabulated and analyzed using percentages.

#### Conclusions

When students were asked in the form of an open-ended question what they liked about individualized courses, the most prevalent responses provided by the students were the opportunity for self-pacing and the opportunity to finish early in the semester. When the participants were asked in the form of an open-ended question what they disliked about individualized courses, the dominant responses were the lack of self-motivation and the difficulty in receiving help from the instructor.

More than 90 percent of the students indicated the following to be positive aspects of individualized

instruction: the opportunity to finish the course before the end of the semester, the opportunity to progress at one's own rate in completing assignments, the opportunity for self-evaluation, tests based on specified objectives, the opportunity to know one's progress at any time, and the opportunity to repeat tests on which one made low grades.

No aspect of individualized instruction was considered to be negative by more than half of the students. Several students did indicate, however, that the small amount of instruction presented by the teacher was a negative aspect of individualized courses.

Students indicated few differences between individualized courses and traditionally taught courses. Flexibility in attendance in individualized courses was considered to be much greater than in traditional courses. The amount of student-teacher interaction and the teacher's recognition of the student in individualized courses was reported to be less than in traditional courses.

Almost three-fourths of the students indicated that if they had a choice, they would take another course by individualized instruction.

The following conclusions can be drawn from the study:

1. The majority of the students liked individualized courses.
2. Students identified almost all aspects of individualized courses to be positive.



3. There were no aspects of individualized courses which a majority of the students considered to be negative.
4. Students indicated that many aspects of individualized courses were no different than in traditional courses.

#### Recommendations

Recommendations for further research include the following:

1. Replicate the study in other colleges of the university to determine whether specific types of courses are better suited to individualized instruction than others.
2. Repeat the study with freshmen and seniors in the Clothing, Textiles and Merchandising Department to determine whether student opinions vary in relation to the level of their education.
3. Conduct a follow-up study of Clothing, Textiles and Merchandising graduates to determine ways in which their participation in individualized courses contributed to success on the job.

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APPENDIXES

APPENDIX A

INDIVIDUALIZED COURSE QUESTIONNAIRE

## INDIVIDUALIZED COURSE QUESTIONNAIRE

Place an "X" by the courses you have taken by individualized instruction:

CTM 1103       CTM 2213       CTM 2573       CTM 4553

Please list all other courses in which you have had individualized instruction:

---

---

What do you like about individualized courses?

What do you dislike about individualized courses?

If you had a choice, would you select another course by individualized instruction?

Are there any ways in which you think individualized courses and methods might be improved?

Additional Comments:



Read the following statements and rate each according to the scale given below. Circle the number corresponding to your choice.

- Scale: 1. Positive aspect of individualized courses  
 2. Negative aspect of individualized courses  
 3. Does not apply--No opportunity to experience  
 4. Undecided

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. The infrequent use of lectures.  | 1 | 2 | 3 | 4 |
| 2. The opportunity to finish the course before the end of the semester  | 1 | 2 | 3 | 4 |
| 3. The use of discussion sections.  | 1 | 2 | 3 | 4 |
| 4. The division of subject matter into small learning units   | 1 | 2 | 3 | 4 |
| 6. Study questions and objectives as a part of each unit  | 1 | 2 | 3 | 4 |
| 7. Flexibility in the time you choose to study (morning, afternoon, weekend, night)                                   | 1 | 2 | 3 | 4 |
| 8. The opportunity to progress at your own rate in completing assignments, units, etc.                                | 1 | 2 | 3 | 4 |
| 9. The opportunity for greater independence in work   | 1 | 2 | 3 | 4 |
| 10. More instruction provided through resources such as library, museum, printed materials and audio-visual materials | 1 | 2 | 3 | 4 |
| 11. The opportunity to use the computer   | 1 | 2 | 3 | 4 |
| 12. The use of audio-tutorial instruction   | 1 | 2 | 3 | 4 |
| 13. The use of programmed instruction   | 1 | 2 | 3 | 4 |
| 14. The opportunity to work with the teacher on a one-to-one basis or in small groups                                 | 1 | 2 | 3 | 4 |
| 15. The opportunity to know exactly what is required for an A, B, C, D  | 1 | 2 | 3 | 4 |
| 16. The ability to choose among learning or evaluation activities   | 1 | 2 | 3 | 4 |
| 17. Tests based on specified objectives   | 1 | 2 | 3 | 4 |

- |     |  |   |   |   |   |
|-----|--|---|---|---|---|
| 18. | The opportunity to know your progress at any time                                      | 1 | 2 | 3 | 4 |
| 19. | The opportunity to repeat tests on which you made low grades                           | 1 | 2 | 3 | 4 |
| 20. | The opportunity to discuss test results with an instructor or assistant                | 1 | 2 | 3 | 4 |
| 21. | The opportunity for self-evaluation (access to answers of problems or study questions) | 1 | 2 | 3 | 4 |

Read the following statements and rate each according to the scale given below. Circle the number corresponding to your choice.

Rate these aspects of individualized courses in relation to traditionally taught courses.

- Scale: 1. Much Less than in traditional courses  
 2. Less than in traditional courses  
 3. No Different than in traditional courses  
 4. Greater than in traditional courses  
 5. Much Greater than in traditional courses

- |     |  |   |   |   |   |   |
|-----|--|---|---|---|---|---|
| 22. | Flexibility in attendance in individualized courses is                           | 1 | 2 | 3 | 4 | 5 |
| 23. | The amount of student-teacher interaction in individualized courses is           | 1 | 2 | 3 | 4 | 5 |
| 24. | Teacher recognition of the student as an individual in individualized courses is | 1 | 2 | 3 | 4 | 5 |
| 25. | The work load in individualized courses is                                       | 1 | 2 | 3 | 4 | 5 |
| 26. | Choice of activities in individualized courses is                                | 1 | 2 | 3 | 4 | 5 |
| 27. | The level of difficulty in individualized courses is                             | 1 | 2 | 3 | 4 | 5 |
| 28. | The clarity of requirements in individualized courses is                         | 1 | 2 | 3 | 4 | 5 |
| 29. | The amount of memorization required in individualized courses is                 | 1 | 2 | 3 | 4 | 5 |
| 30. | Fairness in grading in individualized courses is                                 | 1 | 2 | 3 | 4 | 5 |
| 31. | The amount of learning which takes place in individualized courses is            | 1 | 2 | 3 | 4 | 5 |
| 32. | Improvement of study habits through individualized courses is                    | 1 | 2 | 3 | 4 | 5 |
| 33. | The amount of sustained interest in courses which are individualized is          | 1 | 2 | 3 | 4 | 5 |
| 34. | The amount of motivation provided in individualized courses is                   | 1 | 2 | 3 | 4 | 5 |

35. One's confidence in ability to master assignments in individualized courses is 1 2 3 4 5
36. Feeling of achievement in individualized courses is 1 2 3 4 5

APPENDIX B

WHAT STUDENTS LIKED ABOUT INDI-  
VIDUALIZED COURSES

Following are the comments of students regarding what they liked about individualized courses.

Comments:

You don't have to go to a boring class and you do learn to budget your time.

I am able to fit the studying time around other courses. Outlines are clear and help me when studying for tests.

I can go at my own pace and set my own hours.

I can progress at my own rate.

I can work at my own pace.

I can finish the course early in the semester.

You can do them as you wish and generally you can gain as much from information by reading the text and answering the questions as by going to class and listening to a lecture.

I can work at my own pace and finish early in the semester.

I liked the learning packets. I liked choosing the times when I could work on my own.

I can progress at my own pace.

They give me flexibility. I can schedule the tests around my regular class tests so I do not have to take more than one test a day. I like the option of completing the class early in the semester.

I like being able to work at my own pace.

I can go at my own pace. I like not being required to go to class.

You can go at your own pace.

I like the possibility of finishing early. If you are a fast worker you can work at your own rate to prevent boredom, and you do not have to wait on students who work more slowly than you do.

You can get done early.

I like the fact that you can take the test when you feel ready for it or when you have the time. Also, you don't have to attend a regular class and you can finish the course early.

I like the freedom to miss class.

You can go at your own pace.

You can work at your own pace.

I like taking the tests when I'm ready to take them. I like being able to finish the course early if I want to.

It is not mandatory to attend class. You may finish early. You can take the tests when you are ready.

I like working at my own pace.

You can work at your own pace without having to worry about attendance in class.

You are on your own and you can work at your own pace.

You can move fast and you don't have to go to class. You are allowed to work at your own speed.

I like when I am able to move ahead and not be bored by waiting for the class.

Individualized courses move fast.

Independence.

You can work at your own pace.

I like being able to work on the assignments when I have the time. I also like being able to finish early.

The classes are usually small. The teacher can give you individualized attention.

You can work at your own pace. You are given responsibility for getting work done. You have the chance to spend more time on sections that are difficult for you and less time on the easy sections.

The amount of concentration on the student's own rate of time.

It allows you to go as fast or as slow as you want to. I am an above average student and individualized courses have allowed me to finish quickly.

I like the individual attention. I feel like I am getting my money's worth.

I like the way you can work at your own speed and finish the course early if you work hard.

I feel some courses are just naturally well-suited to individualized study. I've always wished I had been able to take CTM 2573 in this way. I think I would have had a better attitude about it if it had been structured in this way.

I don't feel rushed.

I like being able to get help when I need it (right at that moment). I like being able to work in class.

You can pace yourself. You can save time by not going to class! You can finish early. I would rather read and learn material on my own and then ask questions if I don't understand the material.

I enjoy working at my own pace. Sitting in classrooms does not benefit me very much at all. I tend to daydream and get bored very easily. It is also easier to read the material and understand it rather than listening to someone lecture about it. I like to get involved in what is to be learned.

I like not having to go to class every time. I can work at my own pace.

I like the personal instruction and learning from knowledgeable resources. I learn better when I work at my own rate.

I could pace myself and work at my own speed. I also had the option of finishing the course in 6-8 weeks and being done early in the semester. I didn't have to worry about getting behind. I knew how I was doing at all times.

I liked the choice of attending class when I wanted to.

You can work at your own pace. You can finish early and get it out of the way.

I could work at the speed I wanted to. I liked to finish the course as soon as possible.

You can finish early if you want to.

You can go at your own pace and you can get done early in the semester.

You can go at your own pace and finish when you want.



I can work at my own speed. I learn better in individualized courses. I can take the tests over if they are difficult.

You can get it over with early in the semester.

You don't feel pressured.

I liked the freedom of time and not having to attend class.

You could progress at your own rate. I like the way 4553 is being done; you can come to class if you need help.

You can progress at your own rate. You don't have to go to class all of the time. You can take a test over if you didn't do well.

If you work fast you are not held back by students that work at a slower pace.

You can go at your own speed. They teach you to discipline yourself.

You aren't required to attend each class.

You didn't have to attend classes.

You can work at your own pace.

APPENDIX C

WHAT STUDENTS DISLIKED ABOUT  
INDIVIDUALIZED COURSES

Following are the comments of students regarding what they disliked about individualized courses:

Comments:

Grading scales are steeper and the grading system doesn't allow for grade negotiating.

It is easy to put off doing the work.

They are usually harder to receive help.

I don't have enough self-motivation.

There is often a lack of understanding. It is too easy to put off doing the work.

In the case of CTM 1103, it is a skill and there needs to be more instruction.

Sometimes it is difficult to get help when you need it. The material is not always adequately explained.

I dislike the uncertainty about testing. In correspondence, there was no opportunity to interact with other students.

Sometimes I procrastinate and have trouble meeting deadlines.

I dislike having to do work in the library or audio-tutorial laboratory.

Nothing.

It's a teacher's job to teach a class and not have an individualized course. The teacher teaches things in one specific way and the students learn better from the teacher than if they are on their own.

You don't seem to learn as much as you do in a lecture.

Nothing.

You can't get help if you are having trouble.

I like them!

The inability to get important facts from the material, and not having information for test taking.

There's no instructor discussing the material.

You should be able to look at old tests.

I dislike not making myself go to the help sessions.

I have a tendency to put off work.

Sometimes it is hard to motivate yourself to study.

Sometimes it is not clear what is expected of you on tests.

Sometimes I don't do anything until the last minute because I don't have day by day instructions.

I dislike the lack of help from the instructor.

It is hard for me to pace myself. The teachers aren't prepared to give you the help you need.

No help!

Sometimes it is hard to get help.

Nothing.

It is sometimes hard to get help on the course work. In some classes it is very difficult to determine what will be on the tests.

I dislike not being able to make a selection of teachers for an individualized course. Teachers that are racist, biased or envious can easily discriminate between students if they want to.

Nothing.

There is no opportunity to work with others.

I have no complaint about them.

Sometimes the instructors aren't very knowledgeable about the subject.

Tests tend to be more picky than tests in other courses.

Sometimes my motivation level is very low and I find myself procrastinating and finally cramming to finish assignments.

Sometimes I procrastinate.

There is a due date for everything.

Sometimes there are too many people in class and you don't get to make some choices because of this.

I have difficulty in delegating my study time.

Some courses had an excessive workload--CTM 1103 in particular. It was hard to meet deadlines.

I disliked the lack of communication on requirements.

The deadlines often interfered with my work in other classes.

It was hard to have questions answered.

Sometimes I have motivation problems. If you get stuck on something it isn't always easy to find a teacher to help you.

There are usually more tests.

There is too much subject matter to cover in the small amount of time given.

I didn't learn as much.

Sometimes I procrastinate.

When you have a question it is often difficult to get help.

Nothing.

It is hard to learn all the details by yourself. It is hard to make yourself keep up with the work.

Some units seem a little large.

Some units are too long. I disliked not being able to review the tests.

It was difficult to find a teacher for help with assignments.

I tended to get behind because of slow motivation.

Some classes required you to attend class. CTM 1103 had too much work.

More work is expected of you.

APPENDIX D

STUDENT SUGGESTIONS FOR IMPROVEMENT  
OF INDIVIDUALIZED COURSES

Following are the suggestions of students as listed on the questionnaire for improvement of individualized courses:

Suggestions:

The grading scale should be 90% for an A, 80% for a B, and 70% for a C. Slides and optional reference books would be helpful.

There should be more explicit examples in the learning materials.

The packets or workbooks should contain everything that is covered. Graduate students helping with the course should be knowledgeable of the course content.

Tests should correspond with the readings and assignments.

The instructors should be qualified and knowledgeable of the subject.

The teachers should have a more positive attitude toward the students.

Have more lectures.

Have more help sessions. All IPI courses should have deadlines for the tests.

Better teachers.

The teacher should be available for help at the help sessions.

Have better teachers and better manuals.

The individualized courses can be improved upon if more teachers are available to teach them.

Better availability of instructors for help sessions.

Clearer assignments.

Test improvement.

Be able to progress at your own rate.

Lecture would be beneficial in some courses.

It depends on the course.

Objectives and course material could be more clear-cut. The course should lend itself well to IPI. Deadlines should be easier to meet and more consistent as to the time between them.

Provide a larger variety of learning materials for a broader prospective.

There should be more independent courses.

Make fewer tests within the semester.

I feel that there should be a lot of attention given to the complexity of the subject. If the course is hard for some people, then it should be offered with a lecture session and an IPI section.

Have tests available to be reviewed after the test is taken.

Have the teacher available more often for help.

Provide the students with more chances to take a test.



VITA

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