INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES IN THE UNITED STATES: COMPARISON OF INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Dissertation for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY
STEPHEN PAUL BLUCAS

1977

This is to certify that the

thesis entitled

INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES IN THE UNITED STATES: COMPARISON OF INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

presented by

Stephen Paul Blucas

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in College of Education

Department of Secondary Education and Curriculum

Robert Poland

Major professor

Date July 8, 1977

ABSTRACT

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Purposes of the Study

The first purpose of this study was to help business education establish the present status on the use of individualized typewriting instruction in public community colleges in the United States. This study provided descriptive research in the area of individualized typewriting instruction that was not presently available.

A second purpose for this study was to provide teacher educators with information that will be useful in developing better teacher education programs. By identifying present perceptions and understandings that public community college typewriting instructors hold for their role in individualized instruction, teacher educators can prepare teachers to be more proficient and competent in the use of individualized instruction in typewriting.

Methods and Sources Used

The population for this study consisted of 774 public community colleges in the United States which offered a secretarial program and which were dually listed in the 1976 Community, Junior, and Technical College Directory and in Barron's Guide to the Two-Year Colleges, Volume II:

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Occupational Program Selector. A proportional sample of 250 public community colleges was randomly selected. One typewriting instructor from each of the 250 public community colleges was surveyed. Part I of the questionnaire collected the necessary data pertaining to the respondent and the respondent's institution; Part II was concerned with the respondent's opinion on the importance ("Very Important," "Important," "Undecided," "Somewhat Important," or "Not Important") of 54 selected individualized instruction activities in 9 role areas for individualized instruction. The chi-square test statistic was used to determine differences (.05 level of significance) in the opinions expressed by the instructors.

Summary of Findings

Based on the responses of 186 instructors (74.4 percent response), a summary of selected findings is as follows:

1. Of the 186 respondents, 101, or 54.3 percent, reported using individualized typewriting instruction. The Western Region had the highest percentage of users; the Eastern Region had the lowest percentage of users.

2. Large public community colleges had the highest percentage of users; small public community colleges had the lowest percentage of users.

3. The majority of instructors, 59.4 percent, indicated that the decision to use individualized typewriting instruction was made by the department faculty.

4. The most frequently used approach to individualized typewriting instruction was the audio-visual approach, 58.4 percent; the least used approach was the videotape approach, 5.9 percent.

5. Beginning Typewriting was the course most often reported as using individualized instruction, 92.1 percent. Many instructors reported

using individualized instruction in intermediate and advanced typewriting courses as well as in many specialized courses such as medical typewriting, legal typewriting, and executive typewriting.

6. Overwhelmingly, instructors expressed favorable evaluation on the success of individualized typewriting instruction in their institutions.

7. The most important role in individualized typewriting instruction in the opinion of the instructors was "Analyzer of Student Progress;" the least important role was "Provider of Large Group Instruction and Experiences."

8. The independent variables of years of teaching experience, college enrollment, and individualized typewriting instruction experience had little effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

9. The independent variable of geographic region had no effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

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by

Stephen Paul Blucas

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1977

To my parents,

Walter and Alice Blucas

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ACKNOWLEDGMENTS

The researcher extends his sincere appreciation to all individuals who helped make this study possible.

To Dr. Robert Poland, a sincere appreciation is expressed for his help and encouragement as guidance committee chairman and as dissertation co-director.

To Dr. Richard Gardner, Dr. Zane Quible, Dr. Billie Rader, and Dr. Michael White, who served as members of the guidance committee, gratitude is also extended. To Dr. Rader, a special thanks is extended for serving as dissertation co-director and for always being available when needed.

To the many instructors who responded so well to the questionnaire, appreciation is expressed for their sincere professionalism. Their interest and willingness to assist made this study a success.

To my family and friends, appreciation is expressed for their constant support and encouragement.

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Chapter 1

THE PROBLEM

Introduction

Concern for individualized instruction or for the individual differences of students is not new in education. Leaders in educational theory and practice have advocated greater consciousness of the individual for many years. Business educators, too, have "recognized that providing for the individual needs of students is one of the basic principles of American education."[1]

Individualized instruction is one attempt to meet the needs of individuals who have different experiences, backgrounds, achievement levels, and occupational goals, but at the same time are enrolled in a common class or program. The individualization of instruction can allow each student to be involved in the decisions of what to learn, how to learn, and when it may apply or his/her personal objectives and/or expected outcomes.

The need for individualized instruction is becoming more and more apparent in public community colleges. With an "open-door" policy, the public community college has accepted the task of providing a meaningful education to an increasingly heterogeneous group of students. No other segment of higher education in the United States expects " . . . to serve such a diversity of purposes, to provide such a

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[1]A Statement by the Policies Commission for Business and Economic Education (National Business Education Association), "This We Believe About Implementing Individualization of Instruction in Business Education." Business Education Forum, Vol. 28, No. 8 (May, 1974), p. 18.

variety of educational instruments, or to distribute students among so many types of educational programs . . . ."[2] The community college has, in effect, adopted a philosophy of education opportunity for all--all abilities, all social and economic classes, all interests, and all ages.

Roueche[3] states that if the community college is to deliver upon the implied promise of the "open-door" policy, it "must cast much more widely its net of concern and, based upon individual examination and diagnosis, must formulate with the full participation of the student an individual program of educational development."

In an effort to develop more effective learning situations for students with such widely diversified objectives and goals, instructional methods are undergoing much change. Today, the problem of finding instructional methods that will provide for individual differences is a major challenge of business education in the community college.

The teaching of typewriting at the community college level is a subject area in business education undergoing change. Instructors are faced with the problem of adequately meeting the variety of needs of individual students. To meet students' needs, many instructors are turning to individualized instruction and the application of recent educational technology as a possible and practical solution.

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[2]Leland L. Medsker, The Junior College: Progress and Prospect. (New York: McGraw-Hill Book Company, Inc., 1960), p. vi.

[3]John E. Roueche, "Accountability for Student Learning in the Community College." Educational Technology, Vol. 11, No. 1 (January, 1971), p. 47.

The implication of this instructional revolution involves a dramatic change for the role of the typewriting instructor. With the use of mixed media in the classroom, Rowe[4] states that typewriting can no longer be treated as a teacher-directed skill. If this role change is inevitable, the typewriting instructor may find this change difficult.

Robinson[5] emphasizes that the role of the instructor is very important in individualized instruction. He sees the instructor as the person who controls and prescribes the various instructional techniques to be used with students in conducting a learning experience. The failure or success of individualized typewriting instruction depends on the instructor's performance in the role as "manager of learning" rather than in the role as "dispenser of materials and media of instruction."

Statement of the Problem

The problem in this study was to: (1) determine the extent that individualized instruction in typewriting is being used in public community colleges in the United States and (2) determine and compare the opinions of public community college typewriting instructors in the United States on the importance of selected activities in role areas for individualized instruction.

The following research questions were set forth:

1. What geographic region of public community colleges uses the most individualized instruction in typewriting?

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[4]John L. Rowe, "Applying Six Principles of Individualized Instruction to Beginning and Advanced Typewriting." Business Education World, Vol. 55, No. 3 (January-February, 1975), pp. 28-29.

[5]Jerry W. Robinson, "Is That All There Is--To Individualized Instruction?" The Balance Sheet, Vol. 56, No. 1 (September, 1974), pp. 4-6, 8.

2. Is the size of the student enrollment at a public community college a factor in whether it uses or does not use individualized instruction in the typewriting program?

3. Who is most responsible in the public community college for the decision to implement or to initiate the use of individualized instruction in typewriting?

4. What approaches or methods of individualized typewriting instruction are being used in public community colleges?

5. What courses in the typewriting program in public community colleges use individualized instruction?

6. How do public community college typewriting instructors evaluate the success of individualized typewriting instruction in public community colleges?

7. What importance do public community college typewriting instructors place on selected activities and on role areas in individualized typewriting instruction?

Operational Definitions of the Variables

The design of this study used nine dependent variables and four independent variables.

The dependent variables were the selected activities from the nine role areas for individualized instruction as defined by Lambert:[6]

1. Analyzer of Individual Differences

2. Planner of Courses, Units, and Lessons

3. Provider of Instructional Materials and Media

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[6]Roger Henry Lambert, "Teachers' Perceptions and Principals' Expectations for the Teacher's Role in Individualized Instruction," (unpublished Doctoral dissertation, Michigan State University, 1970).

4. Arranger of Instructional Facilities

5. Provider of Large Group Instruction and Experiences

6. Provider of Small Group Instruction and Experiences

7. Supervisor of Independent Study Experiences

8. Analyzer of Student Progress

9. Communicator of Information to Significant Others

The independent variables were:

1. Teaching experience--defined as the total years of full-time teaching experience of the public community college typewriting instructor using the following categories: 3 years or less; 4 - 7 years; 8 - 11 years; 12 - 15 years; and over 15 years.

2. College enrollment--defined as a small, medium-size, or large public community college based on the following classification plan: small, less than 1,000 full- and part-time students; medium-size, 1,000 - 4,999 full- and part-time students; large, 5,000 or more full- and part-time students.

3. Individualized typewriting instruction experience--defined as to whether the public community college typewriting instructor has or has not taught typewriting using individualized instruction.

4. Geographic region--defined as one of the five regions of the National Business Education Association: Eastern Region, Southern Region, North-Central Region, Mountain-Plains Region, or Western Region.

Hypotheses

To determine if the independent variables affect the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction, the following general null hypotheses were tested:

H_1. There are no significant differences between years of teaching experience in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

H_2. There are no significant differences between college enrollments in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

H_3. There are no significant differences between experiences with individualized typewriting instruction in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

H_4. There are no significant differences between geographic regions in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

Need for the Study

An effective educational program at any level should provide the kind of education that will fit each individual's needs. This educational philosophy held by the public community college offers strong support for the concept of individualized instruction. With an increasingly diverse student body, it is becoming more and more apparent that instruction at the public community college may be individualized to a greater degree than has been done in the past.

Higher education is in the midst of an instructional revolution in which individualized, self-paced methods have come to the fore.

As the movement spreads, according to Cross,[7] the shift in emphasis from "teaching" to "learning" will require major role changes for college instructors. She further states that in the 1980s, college instructors will be as skilled in the diagnosis and treatment of student learning problems as they are in their disciplines.

A study by Hunter and Lingle[8] indicated that individualized instruction is indeed a widely used instructional method and a practice that will continue to grow. These findings provide even more support for the future importance of individualized instruction in the public community college.

Teacher educators need to be aware of current trends and probable future changes in instructional methods. Stukat[9] points out that research of new teacher functions is essential. When a new instructional method or system is introduced, the role of the instructor is often taken for granted. The system or instructional method does not automatically define the instructor's role. "In actual fact, conflicts are probable between well established teaching patterns and radically new teaching functions."[10]

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[7]K. Patricia Cross, "New Roles for College Teachers." Paper presented for the Annual Meeting of the American Association of Community and Junior Colleges (Washington, DC, March 17-19, 1976), 12 pages.

[8]Walter E. Hunter and Ronald K. Lingle, "Status of Individualized Instruction in Colleges Identified as Members of the North Central Community and Junior Colleges, 1974-1975." A report to the Council of North Central Community-Junior Colleges (April, 1975).

[9]Karl-Gustav Stukat, "Teacher Role in Change." Department of Education Research, Gothenburg School of Education (Sweden), October, 1970.

[10]Ibid.

In a recent survey by Calhoun,[11] leaders in business education indicated individualized instruction as an area for needed research. A specific concern expressed was the need to determine the extent that individualized instruction is being used in business education and with what degree of success.

The individualizing of typewriting instruction is currently an area of great interest and concern in business education. Most research in this area, however, has been experimental comparing the individualized instruction approach to the traditional teaching approach. Descriptive research, such as this study, has received little attention. This study, therefore, explored selected aspects of individualized typewriting instruction in public community colleges to provide the impetus for this needed research.

Purpose of the Study

The first purpose served by this study was to help business education establish the present status on the use of individualized typewriting instruction in public community colleges in the United States. This study provided descriptive research in the area of individualized typewriting instruction that was not presently available.

A second purpose for this study was to provide teacher educators with information that will be useful in developing better teacher education programs. By identifying present perceptions and understandings that public community college typewriting instructors hold for their role in individualized instruction, teacher educators can

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[11]Calfrey C. Calhoun, "Needed Research in Business Education." Paper presented at the National Business Education Association Research Foundation Session (San Francisco, California, April 14, 1976), 14 pages.

prepare teachers to be more proficient and competent in the use of individualized instruction in typewriting. The findings may also identify the need for in-service training for instructors in individualized instruction.

Basic Assumptions for the Study

The following assumptions were made for this study:

1. That individualized typewriting instruction was a widely used instructional method in the teaching of typewriting in the public community college to make this study both feasible and practical.

2. That public community college typewriting instructors were sufficiently well-informed on activities in individualized instruction so as to enable them to rate the importance of the selected activities used in this study.

Delimitations of the Problem

The following were delimitations of this study:

1. This study was concerned only with public postsecondary institutions offering a secretarial program of study which were dually listed in the 1976 Community, Junior, and Technical College Directory and in Barron's Guide to the Two-Year Colleges, Volume II: Occupational Program Selector.

2. This study involved only 54 selected activities in individualized instruction; no attempt was made to identify all possible activities in individualized instruction.

3. This study involved only nine role areas for individualized instruction; no attempt was made to identify all possible role areas in individualized instruction.

4. This study was concerned only with public community college typewriting instructors' opinions on the importance of the selected activities in individualized instruction; no attempt was made to determine the extent to which these instructors perform these activities.

Limitation of the Study

The limitation imposed on this study was that the survey instrument was appropriate to measure the importance that public community college typewriting instructors expressed on the selected individualized instruction activities used in this study.

Definition of Terms

Public Community College--a postsecondary institution controlled by a state-appointed or locally elected board which offers a secretarial program of study.

College Enrollment--the number of full- and part-time students at a public community college campus based on the enrollment as of October, 1975, listed in the 1976 Community, Junior, and Technical College Directory.

Small Community College--a public community college enrolling less than 1,000 full- and part-time students.

Medium-size Community College--a public community college enrolling at least 1,000 but fewer than 5,000 full- and part-time students.

Large Community College--a public community college enrolling 5,000 or more full- and part-time students.

Typewriting Instructor--a full-time faculty member in a public community college who teaches typewriting.

Geographic Region--a geographic area of the United States defined by the National Business Education Association; five regions are defined: Eastern Region, Southern Region, North-Central Region, Mountain-Plains Region, and Western Region.

Typewriting Program--a sequence of courses offered at a public community college in the subject area of typewriting.

Individualized Typewriting Instruction--a method of typewriting instruction providing each learner with one or more of the following: individually prescribed learning activities and/or individually paced learning and/or individual evaluation of learner achievement.

Individualized Instruction Activity--a behavior or procedural action that an instructor might perform in individualized instruction.

Individualized Instruction Role Area--the classification of individualized instruction activities into a common group or division.

Role--a set of expected behaviors for an individual in a given situation or position.

Role Perception--an individual's belief about his/her own role in a given situation or position.

Videotape Approach--a type of individualized typewriting instruction providing the learner with televised videotaped sequences for specific learning.

Learning Activity Package Approach--a type of individualized typewriting instruction gathering all the learning materials into carefully designed stand-alone, printed packages.

Programmed Textbook Approach--a type of individualized typewriting instruction leading the student to interact with a series of stimuli, each requiring an active response.

Contract Approach--a type of individualized typewriting instruction developing cooperatively a contract between the student and the instructor specifying outcomes, activities, evaluation, and time for completion.

Audio Approach (e.g. cassette)--a type of individualized typewriting instruction using an audio message, not visual, as the main element of instruction along with other activities.

Audio-Visual Approach (e.g. slide-tape)--a type of individualized typewriting instruction leading the student through a series of learning activities which may include audio, visual, workbook, and lab activities.

Chapter 2

REVIEW OF THE LITERATURE

Interest in the broad area of individualized instruction has been phenomenal in recent years. A search through the literature will produce an extensive list of references which in one way or another are related to various aspects of individualized instruction. The purpose of this chapter, therefore, was to synthesize selected areas in the literature that were considered by the researcher to be important to the development of this study. The following areas were identified: (1) definition of individualized instruction; (2) teaching activities and techniques in individualized instruction; (3) teacher role in individualized instruction; and (4) research in individualized typewriting instruction.

INDIVIDUALIZED INSTRUCTION

"Individualized instruction" is a popular term in business education today. Yet, what is individualized instruction? The answers to this question vary and are often confusing. As Robinson[12] states, the term "individualized instruction" is too often misunderstood, misused, and abused by most who talk and write about it because they emphasize only one factor constituting individualized instruction--time, or rate of learning.

> True individualized instruction involves at least eight crucial variables: (1) individualized goals, (2) individualized

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[12]Jerry W. Robinson, "So You Want To Individualize Typewriting Instruction." Century 21 Reporter (Spring, 1976), p. 12.

> presentation of new learnings, (3) individualized learning/skill building/measurement materials, (4) individually prescribed practice patterns and materials, (5) individualized diagnosis of learning difficulties, (6) individually prescribed remediation, (7) individualized evaluation of criterion-measure performance scores in terms of individual goals, and (8) provision for individualized student progression from activity to activity and from unit to unit.[13]

True individualized instruction, as described by Robinson, is rarely practiced. Instead, what is called "individualized instruction" is really instruction concerned only with the variable of time. Schrag[14] helps to clarify the concept and to differentiate between two levels of individualized instruction. The first level refers to learning situations with a flexible time frame--individually paced instruction. At this level, students are expected to acquire competencies, but the rate at which they acquire the competencies will vary. The second level of individualized instruction is more complex--individually prescribed instruction. At this level, the instructor diagnoses each student's current status and forms a prescription for each student. The student not only learns at his/her own rate, but also selects the competency to be acquired and the method to attain it.

In individualized instruction, several assumptions regarding student learning are made. These assumptions, according to Bartholome,[15] are: (1) students do not achieve at the same rate; (2) students do not achieve by using the same study techniques; (3) students solve problems in different ways; and (4) students possess different patterns of interests.

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[13] Ibid.

[14] Adele F. Schrag, "Prescriptions for Individualizing Instruction," Business Education World, Vol. 57, No. 2 (November-December, 1976), p. 9.

[15] Lloyd W. Bartholome, "Individualization in Typewriting," Journal of Business Education, Vol. 48, No. 4 (January, 1973), p. 160.

Individualized instruction, then, can be defined as instruction which has been designed to provide for individual differences among students. Each student, therefore, is allowed to: (1) work at his/her own rate; (2) learn according to his/her own learning style; (3) make decisions, with the help of the instructor, regarding what he/she will learn; and (4) explore and apply skills to his/her own major field of interest. In other words, a program of individualized instruction is geared to fit the needs of each individual student; the student is not geared to fit the program.

From the reviewed literature in this area, the following definition was formed for this study:

> Individualized Typewriting Instruction: a method of typewriting instruction providing each learner with one or more of the following: individually prescribed learning activities and/or individually paced learning and/or individual evaluation of learner achievement.

ACTIVITIES IN INDIVIDUALIZED INSTRUCTION

An essential step in developing individualized instruction has been the identification of activities that are performed by instructors, by students, and by other instructional means. King,[16] observing teachers in individualized instruction, isolated these activities according to the person or physical facility that could best accomplish it. He made the following breakdown of activities:

Activities Primarily Performed by Teachers

Planning curriculum
Choosing, creating, adapting materials
Diagnosing student needs

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[16]Robert E. King, "Tasks That Only The Teacher Can Do," Quality and the Small School, ed. by Edwin P. Hildebrand (Denver: Colorado Department of Education, 1968), pp. 35-41.

Lecturing
Questioning
Giving directions

Activities Performed Cooperatively by Students and Teachers

Setting goals
Motivating
Planning activities
Guiding
Evaluating
Testing and grading
Disciplining
Coaching
Explaining
Demonstrating

Activities Performed Primarily by Students

Choosing alternatives
Getting materials
Researching
Doing activities
Manipulating equipment
Discussing
Role playing
Job experience
Checking work

Activities Performed by Materials and Equipment

Motivating
Assigning activities
Exposing
Questioning
Drilling
Dispensing information
Testing and grading

In a breakdown such as this, it is readily apparent that many more kinds of activities are being shifted to the realm of student responsibility with the instructor serving as a guide and a supervisor to make certain that learning takes place.

Stutz and Merell[17] describe individualized instruction as needing certain kinds of materials that are not usually available in the

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[17]Rowan C. Stutz and Russell G. Merell, ed., Individualizing Instruction in Small Schools (Salt Lake City: Western States Small Schools Project, 1966), p. 10.

traditional classroom. These materials include placement tests, a sequenced list of objectives for leading to terminal behaviors, appropriate study materials (e.g., outlines, reference books, tapes, films), a performance measure suitable for frequent measurement of achievement of specific objectives, and student record cards to record progress data pertinent to each individual's development in his studies.

In addition to new materials, the instructional arrangement is far more varied in individualized instruction than in a regular classroom teaching situation. Stutz and Merell[18] point out that these instructional arrangements revolve around large group instruction, independent study, small group instruction, directed study, laboratory experiences, tutorial instruction, and research. As such, this instructional format represents a greatly expanded concept of the instructional activities that are normally associated with teaching in a classroom where the instructor disseminates information and the students merely respond through examination on the information.

Bratten[19] reported that individualized instruction was developed in his class through: (1) using study guides which called for a variety of material and equipment; (2) using programmed instruction; (3) using special assignments; and (4) teaching at three levels of difficulty. The organizational features of his program included: (1) a revolving period (students were not scheduled in a specific class at this time); (2) student flexibility in changing schedules; (3) large group instruction;

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[18] Ibid., p. 19.

[19] Jack E. Bratten, The Organization of a Biology Course for Individualized Progress at Theodore High School (Santa Monica, California: Systems Development Corporation, 1965), pp. 6-7.

(4) student teacher assistants; (5) health and personal development classes; and (6) self-pacing (allowing students to be responsible for their own learning).[20]

Esbensen[21] describes individualized instruction in his school ". . . as an arrangement whereby every student is encouraged to pursue learning according to his own personal inventory of abilities, needs, and interests." He suggests that it is possible for students to learn different things in different ways, that students work at different rates, that students can work alone or cooperatively on a problem, and that students can budget their time in order to organize their learning experiences.[22]

Furthermore, according to Esbensen, students can operate their own projectors, record players, and tape recorders; they can locate their own assignment sheets; assemble and work with appropriate instructional material; and finally, take the test that will measure their accomplishment of an educational objective.[23]

According to Glaser,[24] this self-resourcefulness of the student is a trait developed through individualized instruction that is worth pursuing. Some requirements of individualized instruction, as seen by Glaser, include: (1) the conventional grade levels and time units

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[20] Ibid., pp. 9-10.

[21] Thorwald Esbensen, Individualizing the Instructional Program (Duluth, Minnesota: Duluth Public Schools, 1966), p. 18.

[22] Ibid., p. 20.

[23] Ibid., p. 21.

[24] Robert Glaser, The Education of Individuals (Pittsburgh, Pennsylvania: Learning Research and Development Center, University of Pittsburgh, 1966), p. 2.

need to be redesigned to permit students to work on levels of accomplishments; (2) well defined sequences of progressive, behaviorally defined objectives need to be defined in various subject areas to enable the student to measure progress; (3) student progress must be monitored at intervals in order to plan future programs and instruction; (4) students must be taught and provided with appropriate instructional materials for self-directed, self-paced learning; (5) special training must be provided to personnel to help them become proficient in evaluation and diagnosis of student performance; and (6) provision must be made to facilitate the teacher use of student records and information about students for planning of student programs.[25]

Student evaluation is a continuous process in individualized instruction. Students are evaluated in terms of their own accomplishments; evaluation is not dependent upon the performance of others. Most important, standards are in terms of performance objectives. As suggested by Cox and Barton,[26] student achievement can be measured through placement tests, unit pre-tests, post-tests, and curriculum-embedded tests. They describe curriculum-embedded tests as identifying when a student has mastered a single objective within a unit of work.

Schatz[27] stresses that evaluation in individualized instruction is more meaningful and relevant to the student. Individualized instruction allows for the student to evaluate his/her own progress at any point

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[25] Ibid., pp. 5-6.

[26] Richard Cox and Elizabeth Barton, Diagnosis of Pupil Achievement in the Individually Prescribed Instruction Project (University of Pittsburgh: Learning Research and Development Center, 1967), p. 38.

[27] Ann Schatz, "Individualized Instruction in Typewriting and Shorthand." Journal of Business Education, Vol. 46, No. 7 (April, 1971), p. 276.

along the route of instruction. The student can determine, if, when, and how well he/she has achieved a stated instructional objective in contrast to traditional evaluative techniques where the student receives only a letter or numerical rating giving no concrete indication of what constitutes the rating.

It is quite evident, then, that the teaching activities and techniques in individualized instruction emphasize more student involvement, increased student selection of materials and subject matter, increased allowance for students to proceed at their own rate, and more student responsibility for their own learning.

TEACHER ROLE IN INDIVIDUALIZED INSTRUCTION

In a study comparing an active teacher role with a passive teacher role for conducting a self-study program, Coulson[28] found no significant difference among treatment groups using a post-training criterion test. Some conclusions he drew from his study were:

1. Teachers should work on a macroscopic level with variables such as classroom organization, the use of social reinforcers, and the selection of different modes of instruction for different students, such as small group discussion, individually programmed instruction, whole class instruction, etc.

2. Teachers should program their own behavior just as carefully as the instructional material itself is programmed; i.e. the teacher should know in advance that if a certain student performs in a certain way on a certain task, that student should be assigned a certain mode of instruction.

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[28]John E. Coulson, The Teachers Role in Classes Using Self-Study Materials (Santa Monica, California: Systems Development Corporation, 1967, pp. 1-2.

In writing about teacher preparation for individualized instruction, Swenson[29] attempted to identify the teacher characteristics or role assignments that were necessary to operate effectively in an individualized instruction situation. These characteristics include:

1. The teacher needs to know about and have information on the variations found in humans; such as physical, intellectual, perceptual, emotional, social, and economic differences.

2. The teacher needs to understand the implications student variations have for teaching, i.e. what does it mean in terms of teacher behavior when students have different levels of readiness to learn, different abilities to do certain tasks and have varying goals?

3. The teacher needs to accept the idea of learner differences and not reject him/her for these differences.

4. The teacher needs to understand the relationship of the teacher's subject matter competence to differences among learners, i.e. he/she needs enough subject matter to be able to guide learners as they pursue goals in subject areas.

5. The teacher needs to have a good grounding in general education to assist him/her in understanding subject matter and prepare him/her for living as a competent secure adult and citizen. This background will enable him/her to work with students who have interests different from their interests.

6. The teacher needs to know teaching as a human-relations activity. He/she must strike a balance between needs of individuals in a group and the needs of the group.

7. The teacher needs to know that teaching is guiding learning.

8. The teacher needs to understand that teaching is control of the environment for learning to take place; i.e. the physical, psychological, and social environment are important in carrying forth an individualized instruction program.

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[29]Esther J. Swenson, "Teacher Preparation," Individualized Instruction, ed., Nelson B. Henry (Chicago: University of Chicago Press, 1962), pp. 289-297.

Predicting extended use of individualized instruction, Stukat[30] foresees that instructors will spend more time interacting with individual students and small groups, and that team arrangements for common planning and execution of instruction will become widespread. He summarizes the future teacher functions as:

The Teacher Is More Involved In:

- Individual contacts with students
- Diagnostic and evaluative activities
- Prescriptions on learning activities and materials
- Planning and organization
- Cooperation with other personnel
- Counseling and guidance
- Supervision of students working independently
- Small group tutoring
- Stimulating, motivating students, giving positive feedback
- Higher-order cognitive, heuristic teaching

The Teacher Is Less Involved In:

- Contacts with the whole class
- Presenting fact information, drill-practice activities
- Routine managerial tasks
- Giving negative feedback
- Talking (total amount)
- Talking (in relation to student talking)

An appropriate metaphor of the teacher role in individualized instruction is provided by Wolfson.[31] She states that " . . . the teacher is more like a travel consultant." This statement describes the teacher helping students plan within the scope of their overall plans. This planning and suggesting provides additional experiences for students and are as important as the final outcome.

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[30]Stukat, loc. cit.

[31]Bernice J. Wolfson, "Pupil and Teacher Roles in Individualized Instruction," Elementary School Journal, Vol. 68 (April, 1968), p. 359.

Important aspects of the teacher role in individualized instruction, as seen by Wolfson, are:

1. The teacher should be primarily a consultant and resource person to the learner.

2. The teacher should manage the classroom environment, supplying materials and at times initiating new experiences.

3. The teacher should help pupils learn to plan, to evaluate and consider alternatives.

4. The teacher should promote self-direction of students.[32]

In addition, Wolfson suggests that the teacher using individualized instruction will change their classroom pattern in the following ways:

1. The teacher will have a flexible view of individualized activities, small group activities, and large group activities.

2. The teacher will have frequent pupil teacher conferences, both individual and group.

3. The teacher will arrange for temporary interest-centered groups to develop.

4. The teacher will use a wide variety of media.

5. The teacher will use out-of-school resources.

6. The teacher will plan the instructional program cooperatively with students.[33]

The instructor's role, therefore, takes on many new aspects in individualized instruction. The student role also changes. These changes reflect the changes in teacher role and may help in describing the teacher's role. Students in individualized instruction, according to Wolfson, will:

1. Have a more significant role in determining their learning activities.

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[32] Ibid., p. 362.

[33] Ibid.

2. Choose what to learn and in whose company.

3. Plan their studies and evaluate themselves.

4. Be free to raise questions.

5. Be encouraged to clarify their personal meanings and values.

6. Be a self-directing, active learner.[34]

The individualized program, then, is designed so that each student may be treated as an individual. The role of the instructor must also be changed to accomplish this goal. The emphasis must be shifted from teaching to learning, from group conformity to individual progress.

In summary, these apparent changes in the teacher's and the student's role in individualized instruction point to more student responsibility and a change in teacher responsibility from a "disseminator of information" to a "guider of learning experiences."

INDIVIDUALIZED TYPEWRITING INSTRUCTION

Over the past few years, a great deal of literature has been written in the area of individualized typewriting instruction in business education. A considerable amount of experimental research has also been conducted. In an effort to evaluate this teaching technique and to provide a sound basis for conclusions, White[35] reviewed the research in this area and reported a representative sample of the findings.

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[34] Ibid.

[35] Kathryn White, "Review of Research on Individualized Instruction . . . In Business Skill Subjects." Business Education Forum, Vol. 30, No. 4 (January, 1976), pp. 29-31.

According to White, two basic methods of individualized typewriting instruction have been tested and compared with the traditional classroom approach. The first method has been referred to as the programmed textbook approach, individual progress method, or learning activity packages approach. Using this method, the student works at his own rate with written directions from a textbook or other materials. The second method is a method that may use tape-recorded instruction, videotaped instruction, or a combination of any of these with other multimedia equipment.[36]

In beginning typewriting at the secondary level, three researchers compared the programmed approach with the teacher-directed approach. In Vernon's[37] study, the programmed group used programmed units as their basic instructional source and proceeded at their own rate within designated unit time periods. The teacher-directed group received group instruction on the concepts of the units and worked on daily assignments made by the teacher. No significant difference was shown between the two groups in production form scores and in gains in straight-copy accuracy. However, the programmed group made significant gains in production speed; the teacher-directed group made significant gains in production accuracy and in straight-copy speed.

West[38] studied the effect of programmed instruction versus traditional instruction on proficiency at office typing tasks. Students

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[36] Ibid., p. 29.

[37] Mary Sue Vernon, "A Comparison of Self-Paced, Programmed Instruction and Teacher-Directed, Nonprogrammed Instruction in Problem Typewriting in the Beginning Secondary School Course," (unpublished Doctoral dissertation, Georgia State University, 1973).

[38] Leonard J. West, "Effects of Programmed vs. Conventional Instruction on Proficiency at Office-Typing Tasks," (independent study, City University of New York, 1971).

taught by the traditional instruction method were given much explicit teacher and textbook guidance on placement of materials on the page. Students taught by programmed instruction were given explicit instruction via programmed homework on how to make placement decisions. No difference in straight-copy skills was found between the two groups; however, programmed students made significantly fewer errors in placement of materials on a page.

A study by Kline[39] compared teacher-directed and self-paced typewriting instruction in an innovative and a traditional middle school. Students in the teacher-directed class met with the instructor each day for a conventional 30-minute class. The self-directed students were urged to spend about 30 minutes daily in the typewriting carrels in which they had access to programmed materials or records and the accompanying textual materials; these students proceeded at their own rate. No difference in speed or error-control was found between the two groups. Significant difference in techniques, however, was found. Using a videotaped test, a panel of judges found the teacher-directed group to have superior techniques.

Using the programmed instruction method at the collegiate level, Rigby[40] compared teacher-directed instruction and learning activity packages instruction. The experimental group used the learning activity packages and progressed at their own rate; the control

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[39]Geraldine Ann Broeren Kline, "An Analysis of the Achievements and Attitudes of Middle-School Students in a Self-Directed Typewriting Program Compared with Students in a Teacher-Directed Program," (unpublished Doctoral dissertation, University of Colorado, 1971).

[40]Dorothy Sue Rigby, "The Effectiveness of Learning Activity Package Instruction Versus the Teacher-Directed Method of Teaching Intermediate College Typewriting," (unpublished Doctoral dissertation, University of Northern Colorado, 1973).

group met in the traditional, teacher-directed setting. She found that learning activity package instruction was just as effective as, and in some cases more effective than, the traditional method of instruction as measured by students' typewriting speed and accuracy on unit production tests. In addition, the learning activity package method of instruction was better than the traditional method as measured by the students' terminal typewriting speed on the post-test.

In a similar study conducted by Klemin,[41] the control group moved through the instructional program as a traditional structured group while the experimental group proceeded on an individualized progress method. The only significant difference between the two groups was manuscript production speed in favor of the control group.

Warner[42] studied students who were taught by one of three methods: (1) the traditional teacher-directed classroom environment; (2) the tape-recorded and teacher-directed combination classroom environment; and (3) the programmed instruction and tape-recorded, nonteacher-directed classroom environment. He found no significant difference in terminal achievement in typewriting between the groups and concluded that intermediate collegiate typewriting can be taught effectively through the use of programmed instructional materials and audio tape recordings.

Several studies have been conducted to determine the results of typewriting instruction through a multimedia approach. Using tape-

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[41]Vernon Wayne Klemin, "Evaluating the Effectiveness of an Individualized Progress Method of Teaching Intermediate Typewriting at Utah State University," (unpublished Doctoral dissertation, Utah State University, 1974).

[42]Sherman ElVon Warner, "An Experimental Study Utilizing Programmed Instructional Materials and Tape Recordings in the Teaching of Intermediate Collegiate Typewriting," (unpublished Doctoral dissertation, Arizona State University, 1969).

recorded instruction in beginning typewriting, Schellstede[43] and Thoreson[44] found that achievement in speed in straight-copy timed writings was significantly greater for the group using tape-recorded instruction. Thoreson also found that students using the tape-recorded instruction method attained significantly greater speed and accuracy in production timings. Findings in these two studies, however, were contradictory with regard to differences between the groups on straight-copy accuracy. Schellstede found that the group taught through tape-recorded instruction made fewer errors on straight-copy timings; Thoreson found that the traditional, teacher-directed group made fewer errors on straight-copy timings.

Jones[45] compared the multimedia instruction approach with the traditional classroom approach for a beginning typewriting course at the college level. Instruction to the experimental group was given through videotape, listening stations, audio cassette players, printed matter, and film. There was no significant difference between the two groups on straight-copy skills nor in production performance. The attrition rate of students in the audio-tutorial method, however, was significantly greater than the attrition rate of students in the traditional classroom approach.

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[43]Agnes Schellstede, "Teaching Typing with Tapes." Business Education World, Vol. 44, No. 8 (April, 1964), pp. 13-15.

[44]Laverne Dennis Thoreson, "An Experimental Study to Determine the Validity of Individualized Large-Group Multimedia Instruction Compared with Traditional Instruction in First-Year Typewriting," (unpublished Doctoral dissertation, University of North Dakota, 1971).

[45]Arvella Baird Jones, "An Experimental Study to Compare Audio-Tutorial Instruction with Traditional Instruction in Beginning Typewriting," (unpublished Doctoral dissertation, North Texas State University, 1974).

Frye[46] studied the effects on typewriting achievement by students using behavioral objectives in a tape-recorded instruction approach. Students in the experimental group were required to meet the minimum objectives of each lesson as stated in the syllabus before beginning the next lesson. Even though the daily performance objectives were not always met by the students in the traditional group, a new lesson was presented on the next class date. Students using the tape-recorded approach were able to type faster on straight-copy materials, and they were able to type certain production activities with fewer typewriting and placement errors.

Students in a study conducted by Wiper[47] were guided in their instruction through pre-dictated directions from the instructor. He found no differences in achievement in speed, accuracy, and production tests between the two groups.

In Lauer's[48] study evaluating the effectiveness of using prepared videotapes, he found that the experimental group typed significantly more gross words in letter typing than the control group; they also achieved significantly higher scores in statistical tabulation total gross words.

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[46]Marianne Elizabeth Frye, "A Comparative Analysis of the Effect of a Multimedia Instructional Systems Approach with a Traditional Teacher-Directed Group Approach in Collegiate Intermediate Typewriting," (unpublished Doctoral Dissertation, University of North Dakota, 1972).

[47]Robert Ells Wiper, "The Effectiveness of Audio-Monaural Equipment in Skill Building in Typewriting," (unpublished Doctoral dissertation, Oregon State University, 1969).

[48]William Charles Lauer, "Evaluating Effectiveness of Using Business Education Department Prepared Videotapes in the Teaching of Intermediate Typewriting at Utah State University," (unpublished Doctoral dissertation, Utah State University, 1972).

The impact of audiovisual materials on the learning of beginning typewriting was studied by Kupsh.[49] For the study, both experimental and control classes were taught by the individualized method; the experimental classes used a series of five teacher-developed sound-slide packages with supplementary materials, while the control classes used text materials. The findings indicated a significant difference in typing knowledge and concepts in favor of students using the sound-slide packages. However, no difference was found in the speed and accuracy achievement on timed writings. Students using the sound-slide packages spent more time on the course than students not using the packages.

In a study comparing audio-visual tutorial and traditional group instruction, Anderson[50] found the audio-visual tutorial group spent significantly more time than the traditional group in attaining the typewriting speed objective. This difference, however, could not be attributed to methodology of instruction. No difference between the two groups was found as far as knowledge of basic typewriting concepts.

Some researchers have sought to determine the effectiveness of some teacher-directed instruction with nondirected practice or out-of-class assignments--a combination approach. Three researchers conducted studies using teacher-directed instruction for some class periods with open laboratories and individualized practice for completing

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[49]Joyce I. Kupsh, "The Effectiveness of Sound-Slide Packages in Beginning Typing," (unpublished Doctoral dissertation, Arizona State University, 1975).

[50]Marcia Ann Anderson, "A Comparison of Time Spent by College Students Learning Typewriting Via Audio-Visual Tutorial and Traditional Group Instruction," (unpublished Doctoral dissertation, Southern Illinois University, 1975).

the assignments. The researchers, Missling,[51] Thiele,[52] and Valencia,[53] designed varied scheduling plans; but all three experimental groups received some group instruction and used some periods for individualized practice. Thiele and Valencia concluded that reduced teacher instruction will not hinder student ability in beginning typewriting and recommended that more individualized instruction be provided through open laboratories. Missling found, however, that students enrolled in the traditional plan of scheduling achieved a higher rate of speed in both straight-copy and production timings.

White[54] compared the effectiveness of teaching typewriting four days a week to teaching typewriting two days a week with out-of-class assignments. The group meeting two days a week did better in total words typed; but no difference in accuracy between the two groups was found. White concluded that teaching typewriting two days a week with out-of-class assignments was an effective method of teaching intermediate collegiate typewriting.

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[51]Lorraine Pearl Missling, "A Comparison of the Traditional Plan to Three Selected Flexible Modular Plans in First-Semester High School Typewriting with Straight-Copy Achievement and Production Achievement as Criteria," (unpublished Doctoral dissertation, University of North Dakota, 1970).

[52]Sandralee Desombre Thiele, "We Have a Performance Curriculum for Typewriting II." Business Education World, Vol. 49, No. 4 (April, 1969), pp. 10-11, 26.

[53]Atilana Alvino Valencia, "The Effects of Three Laboratory Arrangements Associated with One Type of Large Group Instructional Arrangement in the Learning of Typewriting," (unpublished Doctoral dissertation, Stanford University, 1968).

[54]Fern Kathryn White, "An Experimental Study Utilizing Varied Scheduling and Out-of-Class Assignments in Intermediate Collegiate Typewriting," (unpublished Doctoral dissertation, Oklahoma State University, 1974).

A summary of these research findings related to individualized instruction in typewriting is as follows:

1. The programmed individualized approach to teaching typewriting is equally as effective as the teacher-directed approach in straight-copy and production skills. A few research studies, however, favored the programmed approach for achievement in production form and placement.

2. The multimedia individualized approach to teaching typewriting is favored for developing speed in both straight-copy and production timings.

3. The individualized instruction approach tends to develop efficiency in speed more than it develops efficiency in accuracy.

4. A combination approach (programmed/multimedia with group instruction) is used effectively for developing straight-copy and production skills.[55]

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[55]Kathryn White, op. cit., p. 31.

Chapter 3

RESEARCH PROCEDURES

This chapter presents the research design for this study. The following elements are discussed: the population, the sample and sampling technique, the survey instrument, the pilot study, the instrument reliability, and the statistical analysis.

Population

The population for this study consisted of public community college typewriting instructors and their respective institutions in the United States. For an instructor and his/her institution to be included in this study, the public community college had to be dually listed in the 1976 Community, Junior, and Technical College Directory and in Barron's Guide to the Two-Year Colleges, Volume II: Occupational Program Selector. Using these two sources, a list of 774 public community colleges which offered a secretarial program was compiled. This approach was chosen because a listing of all public community college typewriting instructors in the United States was not available.

Sample

A proportional sample of 250 institutions was randomly selected from the list of the 774 public community colleges. The number of public community colleges included in the sample from each region of the National Business Education Association (NBEA) was based on the percentage of institutions in each region. Table 1 illustrates this sampling procedure for each of the five NBEA regions.

Table 1

POPULATION AND SAMPLE DISTRIBUTION OF PUBLIC COMMUNITY COLLEGES BY NBEA REGION

Region	Population	Percent	Sample
Eastern	120	16.0	40
Southern	208	27.0	68
North-Central	177	23.0	57
Mountain-Plains	109	14.0	35
Western	160	20.0	50
Total	774	100.0	250

As shown in Table 1, the Southern Region had the largest number (68 or 27 percent) of institutions included in the sample. The smallest number (35 or 14 percent) of institutions included in the sample were located in the Mountain-Plains Region. A complete listing of the 250 public community colleges included in this study is located in Appendix A.

Instrumentation

In designing this descriptive study, it was decided that a questionnaire was the most logical method of collecting the data. A copy of this survey instrument appears in Appendix B.

Part I of the questionnaire was designed to collect the necessary data pertaining to the respondent and the respondent's institution. To keep the overall length of the questionnaire at a minimum, the student enrollment for each institution was obtained from the 1976 Community, Junior, and Technical College Directory.

A review of the literature provided an instrument developed by Lambert[56] to be appropriate for gathering the remaining required data. A major purpose for Lambert's study was the development and validation of an instrument that would be used by other researchers to gather similar data from other groups of educators. For this study, however, minor refinements were made to Lambert's original instrument. These revisions included the rewording and selecting of the appropriate individualized instruction activities, the development of a new rating scale, and a change in the overall format of the instrument (Part II of the questionnaire).

The specific scale description and directions used for Part II of the questionnaire are as follows:

> The following is a list of selected activities in individualized instruction. Using the scale provided, please indicate your opinion concerning the importance of each of these activities regardless of whether it is or it is not currently incorporated into your department's typewriting program.
>
> Please record your answer (only one response) by circling the appropriate number in the column to the right of each activity.
>
> 1 Not Important--an activity you believe need not be performed in individualized typewriting instruction.
>
> 2 Somewhat Important--an activity you believe could be desirable, but is not helpful, in individualized typewriting instruction.
>
> 3 Undecided--an activity you are not sure whether it should or it should not be performed in individualized typewriting instruction.
>
> 4 Important--an activity you believe to be helpful, but not essential in individualized typewriting instruction.
>
> 5 Very Important--an activity you believe to be essential in individualized typewriting instruction.

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[56] Lambert, loc. cit.

Instructors were asked to respond to 54 selected individualized instruction activities in 9 role areas for individualized instruction. The activities were categorized and listed on the questionnaire according to the appropriate role area.

A questionnaire, a cover letter, and a return envelope were mailed to each of the 250 public community colleges and were addressed to "Typewriting Instructor." To help ensure a high response, a follow-up of the nonrespondents was also conducted. The survey package was again sent, but this mailing was addressed to "Department Chairman." A separate letter to the department chairman was enclosed asking for their cooperation in forwarding the questionnaire to a typewriting instructor in their department. Using this approach, a 74.4 percent response (186 out of 250) was achieved. Copies of the first cover letter and of the follow-up letters, along with the questionnaire, are provided in Appendix B.

Pilot Study

In order to obtain information about the ability of the respondents to understand and complete the questionnaire correctly, a pilot study was conducted surveying 25 public community college typewriting instructors and their respective institutions. Based on a 68 percent response (17 out of 25), both the questionnaire and the sample size were considered appropriate for this study. The public community colleges included in this pilot study are listed in Appendix C.

Instrument Reliability

As the data obtained from Part II of the researcher's questionnaire was the basis for statistical analysis in this study, the split-halves

technique of reliability was computed for the instructors' responses on the importance of the selected individualized instruction activities. Using the Statistical Package for the Social Sciences (SPSS), a Spearman-Brown reliability coefficient of .83 was obtained. Given this value, it can be stated that Part II of the researcher's questionnaire obtained consistency of measure--instructors were consistent in their responses on the importance of the selected individualized instruction activities.

Analysis of Data

The data received from the respondents was transferred to optical scanning sheets. From these sheets, data cards were produced for use at the computer facilities at Michigan State University.

Statistical Package for the Social Sciences (SPSS) was used to analyze the data. The specific subprograms used were CONDESCRIPTIVE and CROSSTABS which provided both descriptive and statistical analysis.

The chi-square technique was recommended by research consultants as the most appropriate statistical test for this study. A .05 level of significance was set.

Chapter 4

FINDINGS

This chapter presents the analysis of the responses from the public community college typewriting instructors who participated in the study. Due to the large amount of data collected by the survey instrument, this analysis is divided into four main sections.

The first section presents background information on the respondents. The second section provides descriptive data concerning the present use of individualized typewriting instruction in public community colleges in the United States. The third section of this chapter presents the overall ranking of the importance expressed by the instructors on each of the 54 selected individualized instruction activities and on each of the 9 role areas. Frequency count and percent of response for each activity are also presented. Both the second and the third section of this chapter relate directly to answering the research questions stated in Chapter 1.

The fourth section of this chapter is concerned with the effect of the 4 independent variables on the 54 selected individualized instruction activities. Each individualized instruction activity was tested using the chi-square test statistic to determine significant differences (.05 level) in the opinions of the instructors.

Significant differences in the opinions of the instructors on the importance of the 54 selected individualized instruction activities were found when other independent variables were used (sex, age, level of education, and two-year college teaching experience). As these

independent variables were not part of this study, nor of primary interest to the researcher, these findings are reported in Appendix E.

BACKGROUND OF RESPONDENTS

The data summarized in this study were compiled from the responses of the 186 public community college typewriting instructors (74.4 percent response) who returned the questionnaire sent to his/her respective institution.

One of the hypotheses involved the analysis of the data based on the five geographic regions of the National Business Education Association.

The largest percentage of response was received from the North-Central Region; 45 out of 57, or 78.9 percent, responded. The smallest percentage of response was received from the Southern Region; 46 out of 68, or 67.6 percent, responded. The percentage of response for each NBEA region is summarized in Table 2.

Another hypothesis involved the analysis of the data based on the total student enrollment for each public community college. Using the October, 1975, enrollments published in the 1976 Community, Junior, and Technical College Directory, the 186 institutions were classified as follows: 49 small (less than 1,000 students); 125 medium-size (1,000 - 4,999 students); and 76 large (5,000 or more students).

The largest percentage of response was received from large public community colleges; 58 out of 76, or 76.3 percent, responded. The smallest percentage of response was received from small public community colleges; 33 out of 49, or 67.3 percent, responded. Table 3 summarizes the response rate by community college enrollment.

Table 2

RESPONSE BY NBEA REGION

Region	Responses	Percent	No Responses	Percent	Total
Eastern	30	75.0	10	25.0	40
Southern	46	67.6	22	32.4	68
North-Central	45	78.9	12	21.1	57
Mountain-Plains	27	77.1	8	22.9	35
Western	38	76.0	12	24.0	50
Total	186		64		250
Percent	74.4		25.6		100.0

Table 3

RESPONSE BY PUBLIC COMMUNITY COLLEGE ENROLLMENT

Enrollment	Responses	Percent	No Responses	Percent	Total
Small less than 1,000	33	67.3	16	32.7	49
Medium-size 1,000 - 4,999	95	76.0	30	24.0	125
Large 5,000 or more	58	76.3	18	23.7	76
Total	186		64		250
Percent	74.4		25.6		100.0

Table 4 illustrates the frequency count and percentage of response for the data collected in Part I of the questionnaire pertaining to the public community college typewriting instructor.

Table 4

PROFILE OF PUBLIC COMMUNITY COLLEGE TYPEWRITING INSTRUCTORS

(N = 186)

Variable	Frequency	Percent
Sex		
Male	43	23.1
Female	143	76.9
TOTAL	186	100.0
Age		
25 or under	5	2.7
26 - 35	63	33.9
36 - 45	64	34.4
46 - 55	36	19.4
56 or older	18	9.7
TOTAL	186	100.0
Level of Education		
less than Baccalaureate	2	1.1
Baccalaureate	26	14.0
Masters	138	74.2
Specialist	11	5.9
Doctorate	9	4.8
TOTAL	186	100.0
Total full-time teaching experience		
3 years or less	18	9.7
4 - 7 years	37	19.9
8 - 11 years	40	21.5
12 - 15 years	28	15.1
over 15 years	63	33.9
TOTAL	186	100.0
Total full-time, two-year college, teaching experience		
3 years or less	44	23.7
4 - 7 years	58	31.2
8 - 11 years	51	27.4
12 - 15 years	23	12.4
over 15 years	10	5.4
TOTAL	186	100.0

Table 4, Continued

Variable	Frequency	Percent
Individualized typewriting instruction experience		
Yes	124	66.7
No	62	33.3
TOTAL	186	100.0

Based on the levels most frequently selected for each of the variables in Table 4, the typical public community college typewriting instructor respondent was as follows: female, between ages 36 - 45, having a masters degree, having over 15 years of full-time teaching experience, having between 4 - 7 years of full-time, two-year college teaching experience, and having experience with individualized typewriting instruction.

INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES IN THE UNITED STATES

Of the 186 public community college typewriting instructors included in this analysis, 101, or 54.3 percent of the respondents, reported that their departments used individualized instruction in their typewriting program. The Western Region had the highest percentage of users; 73.7 percent (28 out of 38) reported using individualized typewriting instruction. The Eastern Region had the lowest percentage of users; 40.0 percent (12 out of 30) reported using individualized instruction in typewriting. A summary of users and nonusers of individualized typewriting instruction for each of the five NBEA regions is provided by Table 5.

Table 5

INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES BY NBEA REGION

Region	Number of Users	Percent of Users	Number of Nonusers	Percent of Nonusers	Total
Eastern	12	40.0	18	60.0	30
Southern	20	43.5	26	56.5	46
North-Central	25	55.6	20	44.4	45
Mountain-Plains	16	59.3	11	40.7	27
Western	28	73.7	10	26.3	38
Total	101		85		186
Percent	54.3		45.7		100.0

Using the total number of full- and part-time students enrolled in each public community college, the 186 institutions were categorized into the three size classifications earlier defined in the study. Of the 186 institutions, 33 had enrollments of less than 1,000 students; 95 had enrollments of 1,000 - 4,999 students; and 58 had enrollments of 5,000 or more students.

As shown in Table 6, large institutions had the highest percentage of users; 60.3 percent (35 out of 58) reported using individualized typewriting instruction. In medium-size institutions, 51.6 percent (49 out of 95) used individualized typewriting instruction. In small institutions, 51.5 percent (17 out of 33) reported using individualized typewriting instruction.

Table 6

INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES BY ENROLLMENT

Enrollment	Number of Users	Percent of Users	Number of Nonusers	Percent of Nonusers	Total
Small					
less than 1,000	17	51.5	16	48.5	33
Medium-size					
1,000 - 4,999	49	51.6	46	48.4	95
Large					
5,000 or more	35	60.3	23	39.7	58
Total	101		85		186
Percent	54.3		45.7		100.0

The instructors in each institution were asked to indicate who was most responsible for the decision to implement individualized typewriting instruction in their department's typewriting program. The majority of instructors, 59.4 percent, reported that the decision to use individualized typewriting instruction was made by the department faculty. Many instructors indicated both "Department faculty" and "Department chairman" as the implementor. They commented that although the department chairman may have initiated the idea, the final decision was made by consensus of the department faculty. Many instructors also commented that the decision to use individualized instruction in their typewriting courses was entirely their own prerogative. Table 7 provides a summary of the instructors' responses from the 101 institutions using individualized typewriting instruction.

Table 7

IMPLEMENTORS OF INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES

Implementor	Frequency	Percent*
Department faculty	60	59.4
Department chairman	32	31.7
Instructional media personnel	3	3.0
College administration other than department chairman	19	18.8
Other	4	4.0

*Based on N = 101

From a listing of instructional approaches for individualized typewriting instruction, the 101 instructors indicated the approach, or the approaches, that best described their department's methodology for using individualized instruction in the typewriting program.

The most frequently used approach was the audio-visual (e.g. slide-tape) approach; 59, or 58.4 percent, of the 101 instructors indicated use of this approach. The learning activity package approach and the programmed textbook approach were also reported as being frequently used, 29.7 percent and 24.8 percent respectively for each approach. The least used approach to individualized typewriting instruction was the videotape approach; only 6, or 5.9 percent, reported using this approach. The frequency and percentage of use for each approach is presented in Table 8.

Of the 101 instructors, 93 (92.1 percent) reported that individualized instruction was being used in the beginning typewriting course.

Table 8

APPROACHES TO INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES

Approach	Frequency	Percent*
Videotape	6	5.9
Learning Activity Package	30	29.7
Programmed Textbook	25	24.8
Contract	22	21.8
Audio (e.g. cassette)	20	19.8
Audio-Visual (e.g. slide-tape)	59	58.4
Other	2	2.0

*Based on N = 101

Many instructors reported that individualized instruction was also being used in the intermediate and advanced typewriting courses. Thus, many departments are using individualized instruction throughout their typewriting programs. In addition, the instructors commented that individualized instruction was being used for specialized typewriting courses; such as medical typewriting, legal typewriting, executive typewriting, etc. Table 9 summarizes the typewriting courses using individualized instruction for the 101 public community colleges.

Finally, the instructors were asked to evaluate the use of individualized typewriting instruction in their departments in terms of meeting students' needs and in terms of students' achievements. Overwhelmingly, the instructors expressed favorable opinions on the use of individualized typewriting instruction in their institutions.

Table 9

INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES BY COURSES

Course	Frequency	Percent*
Beginning Typewriting	93	92.1
Intermediate Typewriting	78	77.2
Advanced Typewriting	69	68.3
Other	26	25.7

*Based on N = 101

Table 10 summarizes the instructors' evaluations.

Table 10

EVALUATION OF INDIVIDUALIZED TYPEWRITING INSTRUCTION IN PUBLIC COMMUNITY COLLEGES

Evaluation	Frequency	Percent
Very Successful	33	32.7
Successful	48	47.5
Somewhat successful	16	15.8
Not meeting anticipated expectations	4	4.0
Total	101	100.0

As shown in Table 10, 48, or 47.5 percent, of the 101 instructors evaluated their experience as "Successful;" 33, or 32.7 percent, evaluated

their experience as "Very Successful." Only 4 of the 101 instructors, or 4.0 percent, indicated that using individualized typewriting instruction was "Not meeting anticipated expectations."

Many instructors commented that they believed the student to be a key factor in the success and effectiveness of individualized typewriting instruction. Instructors expressed the opinion that this method of instruction was more appropriate for the highly-motivated and self-disciplined student. The statement--"Individualized typewriting instruction is not for all students."--was repeated many times in the instructors' comments. Many instructors further commented that their departments offered typewriting in both individualized and traditional classroom settings.

INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Part II of the questionnaire listed the 54 selected individualized instruction activities in the 9 role areas. Instructors were asked to express their opinions concerning the importance of each of these activities regardless of whether it was or it was not currently incorporated into their department's typewriting program. The following rating scale was provided:

1 Not Important--an activity you believe need not be performed in individualized typewriting instruction.

2 Somewhat Important--an activity you believe could be desirable, but is not helpful, in individualized typewriting instruction.

3 Undecided--an activity you are not sure whether it should or it should not be performed in individualized typewriting instruction.

4 Important--an activity you believe to be helpful, but not essential in individualized typewriting instruction.

5 Very Important--an activity you believe to be essential in individualized typewriting instruction.

A weighted mean ("Very Important" equals 5 points; "Important" equals 4; "Undecided" equals 3; "Somewhat Important" equals 2; and "Not Important" equals 1) and an overall rank for each activity and for each role area were calculated. The frequency for "No Response" was excluded in the weighted mean calculation.

The weighted mean values for the 54 selected individualized instruction activities ranged from a weighted mean value of 2.598 to a weighted mean value of 4.800. The five most important individualized instruction activities in the opinion of the instructors are presented in Table 11.

Table 11

RANKING BY INSTRUCTORS OF THE FIVE MOST IMPORTANT INDIVIDUALIZED INSTRUCTION ACTIVITIES

Overall Rank		Activity	Weighted Mean
1	9-3	Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	4.800
2	8-1	Provides relatively frequent assessment of student progress.	4.727
3	8-2	Measures progress in terms of previously stated performance objectives.	4.672

Table 11, Continued

Overall Rank		Activity	Weighted Mean
4.5	1-1	Holds individual conferences with students to discuss problems, past achievements, and plans.	4.630
4.5	8-5	Helps student understand and accept his/her achievements.	4.630

The five least important individualized instruction activities in the opinion of the instructors are presented in Table 12.

Table 12

RANKING BY INSTRUCTORS OF THE FIVE LEAST IMPORTANT INDIVIDUALIZED INSTRUCTION ACTIVITIES

Overall Rank		Activity	Weighted Mean
50	5-1	Conducts large group tours and field visitations.	2.903
51	4-3	Arranges for students to use selected school equipment away from school for instructional purposes.	2.880
52	5-3	Uses large group assemblies to collect and disseminate necessary information.	2.869
53	1-3	Collects autobiographies, anecdotal records, and other information to help assess student differences.	2.697
54	5-2	Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	2.598

The role area considered by the instructors to be the most important in individualized instruction was "Analyzer of Student Progress." The role area considered to be the least important in individualized instruction was "Provider of Large Group Instruction and Experiences." The ranking of all nine role areas from the most important to the least important is presented in Table 13.

Table 13

RANKING BY INSTRUCTORS OF THE NINE ROLE AREAS FOR INDIVIDUALIZED TYPEWRITING INSTRUCTION

Overall Rank	Role Area	Weighted Mean
1	Analyzer of Student Progress	4.502
2	Supervisor of Independent Study Experiences	4.376
3	Planner of Courses, Units, and Lessons	4.103
4	Communicator of Information to Significant Others	3.980
5	Analyzer of Individual Differences	3.957
6	Provider of Instructional Materials and Media	3.949
7	Provider of Small Group Instruction and Experiences	3.783
8	Arranger of Instructional Facilities	3.690
9	Provider of Large Group Instruction and Experiences	3.114

Table 14 provides a frequency count, the percentage of response, and an overall rank for each of the 54 selected individualized instruction activities and for each of the 9 role areas.

Table 14

FREQUENCY COUNTS AND PERCENTAGE RESPONSES FOR SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Activities		No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	Weighted Mean	Overall Rank
ANALYZER OF INDIVIDUAL DIFFERENCES									
1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.	F*	2	1	7	4	35	137	4.630	4.5
	P	1.1	0.5	3.8	2.2	18.8	73.7		
1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics.	F	1	12	20	31	68	54	3.714	38
	P	0.5	6.5	10.8	16.7	36.6	29.0		
1-3 Collects autobiographies, anecdotal records, and other information to help assess student differences.	F	1	38	45	52	35	15	2.697	53
	P	0.5	20.4	24.2	28.0	18.8	8.1		
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	F	1	10	18	33	38	86	3.930	32
	P	0.5	5.4	9.7	17.7	20.4	46.2		
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	F	1	6	9	14	46	110	4.324	20
	P	0.5	3.2	4.8	7.5	24.7	59.1		

*F = Frequency; P = Percentage

Table 14, Continued

Activities		No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	Weighted Mean	Overall Rank
1-6 Diagnoses how each student learns best.	F	3	6	11	29	63	74	4.027	28
	P	1.6	3.2	5.9	15.6	33.9	39.8		
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	F	1	7	7	18	70	83	4.162	26
	P	0.5	3.8	3.8	9.7	37.6	44.6		
1-8 Discusses career goals with individual students.	F	1	1	16	14	72	82	4.178	25
	P	0.5	0.5	8.6	7.5	38.7	44.1		
ROLE TOTAL	F	11	81	133	195	427	641	3.957	5
	P	.74	5.44	8.94	13.10	28.70	43.08		
PLANNER OF COURSES, UNITS, AND LESSONS									
2-1 Develops course materials cooperatively with students.	F	1	25	28	37	63	32	3.265	46
	P	0.5	13.4	15.1	19.9	33.9	17.2		
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	F	1	4	10	7	56	108	4.373	14
	P	0.5	2.2	5.4	3.8	30.1	58.1		
2-3 Allows for different rates of learning in developing course materials.	F	1	3	2	8	38	134	4.611	7
	P	0.5	1.6	1.1	4.3	20.4	72.0		

Table 14, Continued

Activities		No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	Weighted Mean	Overall Rank
2-4 Develops cooperatively with students the performance goals and outcomes expected for them from the course or units.	F	2	17	22	20	70	55	3.674	40
	P	1.1	9.1	11.8	10.8	37.6	29.6		
2-5 Provides study guides that lead the student from one learning experience to another.	F	2	1	10	10	61	102	4.375	13
	P	1.1	0.5	5.4	5.4	32.8	54.8		
2-6 Incorporates laboratory activities that complement the classroom work.	F	4	2	2	4	47	127	4.621	6
	P	2.2	1.1	1.1	2.2	25.3	68.3		
2-7 Incorporates out-of-school learning experiences (i.e. work experience) into a student's study program.	F	1	12	23	32	66	52	3.665	41
	P	0.5	6.5	12.4	17.2	35.5	28.0		
2-8 Designs curriculum to allow for self-instruction.	F	1	1	15	12	66	91	4.249	22
	P	0.5	0.5	8.1	6.5	35.5	48.9		
ROLE TOTAL	F	13	65	112	130	467	701	4.103	3
	P	.87	4.37	7.53	8.74	31.38	47.11		
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA									
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	F	1	1	6	12	54	112	4.459	10.5
	P	0.5	0.5	3.2	6.5	29.0	60.2		

Table 14, Continued

Activities		No -Response	Not -Important	Somewhat -Important	-Undecided	-Important	Very -Important	Weighted -Mean	Overall -Rank
3-2 Prepares instructional materials needed by individual students.	F	2	4	11	11	52	106	4.332	19
	P	1.1	2.2	5.9	5.9	28.0	57.0		
3-3 Assists students in preparation of instructional materials for their own use.	F	2	26	26	44	52	36	3.250	47
	P	1.1	14.0	14.0	23.7	28.0	19.4		
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	F	1	10	14	12	42	107	4.200	24
	P	0.5	5.4	7.5	6.5	22.6	57.5		
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	F	1	18	28	27	67	45	3.503	42
	P	0.5	9.7	15.1	14.5	36.0	24.2		
ROLE TOTAL	F	7	59	85	106	267	406	3.949	6
	P	.75	6.34	9.14	11.40	28.71	43.66		
ARRANGER OF INSTRUCTIONAL FACILITIES									
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	F	1	7	14	18	76	70	4.016	29
	P	0.5	3.8	7.5	9.7	40.9	37.6		
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	F	1	3	9	10	60	103	4.357	16
	P	0.5	1.6	4.8	5.4	32.3	55.4		

Table 14, Continued

Activities		No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	Weighted Mean	Overall Rank
4-3 Arranges for students to use selected school equipment away from school for instructional purposes.	F	2	42	24	55	40	23	2.880	51
	P	1.1	22.6	12.9	29.6	21.5	12.4		
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	F	3	21	28	38	79	17	3.235	48
	P	1.6	11.3	15.1	20.4	42.5	9.1		
4-5 Arranges with business and industry the proper facilities for a student to obtain work experience.	F	1	17	19	21	73	55	3.703	39
	P	0.5	9.1	10.2	11.3	39.2	29.6		
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	F	3	13	10	23	66	71	3.940	30
	P	1.6	7.0	5.4	12.4	35.5	38.2		
ROLE TOTAL	F	11	103	104	165	394	339	3.690	8
	P	.99	9.23	9.32	14.78	35.30	30.38		
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES									
5-1 Conducts large group tours and field visitations.	F	1	38	38	34	54	21	2.903	50
	P	0.5	20.4	20.4	18.3	29.0	11.3		
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	F	2	51	37	43	41	12	2.598	54
	P	1.1	27.4	19.9	23.1	22.0	6.5		

Table 14, Continued

Activities		No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	Weighted Mean	Overall Rank
5-3 Uses large group assemblies to collect and disseminate necessary information.	F	3	42	32	41	44	24	2.869	52
	P	1.6	22.6	17.2	22.0	23.7	12.9		
5-4 Provides large groups with factual course content information of common interest to all.	F	3	21	23	27	75	37	3.459	43
	P	1.6	11.3	12.4	14.5	40.3	19.9		
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	F	2	17	18	20	69	60	3.745	36
	P	1.1	9.1	9.7	10.8	37.1	32.3		
ROLE TOTAL	F	11	169	148	165	283	154	3.114	9
	P	1.18	18.17	15.91	17.74	30.43	16.56		
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES									
6-1 Orients students to small group learning methods.	F	3	10	18	21	67	67	3.891	34
	P	1.6	5.4	9.7	11.3	36.0	36.0		
6-2 Varies the schedule to accommodate a variety of learning activities.	F	4	9	7	10	58	98	4.258	21
	P	2.2	4.8	3.8	5.4	31.2	52.7		
6-3 Participates actively in certain small group activities.	F	4	13	18	25	75	51	3.731	37
	P	2.2	7.0	9.7	13.4	40.3	27.4		
6-4 Reacts within groups as an equal.	F	3	25	22	47	48	41	3.317	45
	P	1.6	13.4	11.8	25.3	25.8	22.0		

Table 14, Continued

Activities		No -Response	Not -Important	Somewhat -Important	-Undecided	-Important	Very Important	Weighted Mean	Overall -Rank
6-5 Removes himself/herself physically from certain small group activities.	F	4	20	14	61	53	34	3.368	44
	P	2.2	10.8	7.5	32.8	28.5	18.3		
6-6 Accepts contributions from all group participants as being worthwhile.	F	3	10	7	21	56	89	4.131	27
	P	1.6	5.4	3.8	11.3	30.1	47.8		
ROLE TOTAL	F	21	87	86	185	357	380	3.783	7
	P	1.88	7.80	7.71	16.58	31.99	34.05		
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES									
7-1 Orients students to independent study techniques.	F	3	4	6	5	55	113	4.459	10.5
	P	1.6	2.2	3.2	2.7	29.6	60.8		
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	F	3	5	5	8	69	96	4.344	17
	P	1.6	2.7	2.7	4.3	37.1	51.6		
7-3 Assists student in assessing progress and in planning supporting and/or advanced study programs.	F	3	4	8	9	63	99	4.339	18
	P	1.6	2.2	4.3	4.8	33.9	53.2		
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	F	3	5	4	7	71	96	4.361	15
	P	1.6	2.7	2.2	3.8	38.2	51.6		

Table 14, Continued

Activities		No -Response	Not -Important	Somewhat -Important	-Undecided	-Important	Very -Important	Weighted -Mean	Overall -Rank
ROLE TOTAL	F	12	18	23	29	258	404	4.376	2
	P	1.61	2.42	3.09	3.90	34.68	54.30		
ANALYZER OF STUDENT PROGRESS									
8-1 Provides relatively frequent assessments of student progress.	F	3	0	2	3	38	140	4.727	2
	P	1.6	0.0	1.1	1.6	20.4	75.3		
8-2 Measures progress in terms of previously stated performance objectives.	F	3	1	0	3	50	129	4.672	3
	P	1.6	0.5	0.0	1.6	26.9	69.4		
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	F	2	1	2	5	52	124	4.609	8
	P	1.1	0.5	1.1	2.7	28.0	66.7		
8-4 Avoids using evaluative results to emphasize the student's inadequacies and shortcomings.	F	2	11	9	47	35	82	3.913	33
	P	1.1	5.9	4.8	25.3	18.8	44.1		
8-5 Helps student understand and accept his/her achievements.	F	2	0	2	0	62	120	4.630	4.5
	P	1.1	0.0	1.1	0.0	33.3	64.5		
8-6 Assists student in using evaluative data in planning future study.	F	2	2	5	6	72	99	4.418	12
	P	1.1	1.1	2.7	3.2	38.7	53.2		

Table 14, Continued

Activities		No -Response	Not -Important	Somewhat -Important	-Undecided	-Important	Very -Important	Weighted -Mean	Overall -Rank
8-7 Helps student develop an accurate self-appraisal.	F	2	1	4	5	58	116	4.543	9
	P	1.1	0.5	2.2	2.7	31.2	62.4		
ROLE TOTAL	F	16	16	24	69	367	810	4.502	1
	P	1.23	1.23	1.84	5.30	28.19	62.21		
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS									
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	F	2	2	8	15	78	81	4.239	23
	P	1.1	1.1	4.3	8.1	41.9	43.5		
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	F	2	5	16	27	74	62	3.935	31
	P	1.1	2.7	8.6	14.5	39.8	33.3		
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	F	1	0	1	2	30	152	4.800	1
	P	0.5	0.0	0.5	1.1	16.1	81.7		
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	F	2	13	13	28	80	50	3.766	35
	P	1.1	7.0	7.0	15.1	43.0	26.9		

Table 14, Continued

Activities		No - Response	Not - Important	Somewhat - Important	- Undecided	- Important	Very - Important	Weighted - Mean	Overall - Rank
9-5 Arranges evaluative conferences between parents, students, employers, etc.	F	2	25	27	50	58	24	3.158	49
	P	1.1	13.4	14.5	26.9	31.2	12.9		
ROLE TOTAL	F	9	45	65	122	320	369	3.980	4
	P	.97	4.84	6.99	13.12	34.41	39.68		

Note: Weighted Mean calculation excludes frequency of No Response.

COMPARISON OF INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

As stated in Chapter 1, four independent variables were selected to determine agreements or differences in the opinions expressed by public community college typewriting instructors on the importance of the 54 selected individualized instruction activities.

Teaching Experience

The first hypothesis was concerned with the effect of total years of teaching experience on the opinions expressed by the instructors on the importance of the individualized instruction activities.

Of the 186 instructors, 18 (9.7 percent) had 3 years or less of teaching experience; 37 (19.9 percent) had 4 - 7 years of teaching experience; 40 (21.5 percent) had 8 - 11 years of teaching experience; 28 (15.1 percent) had 12 - 15 years of teaching experience; and 63 (33.9 percent) had over 15 years of teaching experience.

Significant differences between total years of teaching experience in the instructors' opinions on the importance of the following three individualized instruction activities were found:

6-4 Reacts within groups as an equal.

8-6 Assists student in using evaluative data in planning future study.

8-7 Helps student develop an accurate self-appraisal.

The null hypotheses that there are no differences between total years of teaching experience in the instructors' opinions on these three activities can be rejected. The chi-square value for each of the 54 individualized instruction activities is presented in Table 15.

Table 15

DIFFERENCES BETWEEN YEARS OF TEACHING EXPERIENCE IN INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Activity	Chi-Sq.	Sign. Level
ANALYZER OF INDIVIDUAL DIFFERENCES		
1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.	16.768	NS*
1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics.	13.691	NS
1-3 Collects autobiographies, anecdotal records, and other information to help assess student differences.	14.814	NS
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	12.464	NS
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	16.810	NS
1-6 Diagnoses how each student learns best.	17.950	NS
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	23.225	NS
1-8 Discusses career goals with individual students.	23.087	NS

*NS - Not Significant

Table 15, Continued

Activity	Chi-Sq.	Sign. Level
PLANNER OF COURSES, UNITS, AND LESSONS		
2-1 Develops course materials cooperatively with students.	23.131	NS
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	21.555	NS
2-3 Allows for different rates of learning in developing course materials.	11.321	NS
2-4 Develops cooperatively with students the performance goals and outcomes expected for them in the course or units.	11.104	NS
2-5 Provides study guides that lead the student from one learning experience to another.	25.269	NS
2-6 Incorporates laboratory activities that complement the classroom work.	18.431	NS
2-7 Incorporates out-of-school learning experiences (i.e. work experience) into a student's study program.	12.377	NS
2-8 Designs curriculum to allow for self-instruction.	14.497	NS
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA		
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	15.157	NS
3-2 Prepares instructional materials needed by individual students.	18.915	NS
3-3 Assists students in preparation of instructional materials for their own use.	26.884	NS

Table 15, Continued

Activity	Chi-Sq.	Sign. Level
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	14.552	NS
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	20.584	NS
ARRANGER OF INSTRUCTIONAL FACILITIES		
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	22.277	NS
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	19.636	NS
4-3 Arranges for student to use selected school equipment away from school for instructional purposes.	17.725	NS
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	19.978	NS
4-5 Arranges with business and industry the proper facilities for a study to obtain work experience.	27.047	NS
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	29.682	NS
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES		
5-1 Conducts large group tours and field visitations.	12.748	NS
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	21.317	NS

Table 15, Continued

Activity	Chi-Sq.	Sign. Level
5-3 Uses large group assemblies to collect and disseminate necessary information.	12.695	NS
5-4 Provies large groups with factual course content information of common interest to all.	23.612	NS
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	18.142	NS
PROVIDER OF SMALL GROUP INSTRUCTION AND EXPERIENCES		
6-1 Orients students to small group learning methods.	12.180	NS
6-2 Varies the schedule to accommodate a variety of learning activities.	21.506	NS
6-3 Participates actively in certain small group activities.	18.726	NS
6-4 Reacts within groups as an equal.	33.608	.05*
6-5 Removes himself/herself physically from certain small group activities.	13.132	NS
6-6 Accepts contributions from all group participants as being worthwhile.	15.807	NS
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES		
7-1 Orients students to independent study techniques.	18.227	NS

*Chi-square test statistic is illustrated in Appendix D, Table I.

Table 15, Continued

Activity	Chi-Sq.	Sign. Level
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	25.449	NS
7-3 Assists student in assessing progress and in planning supporting and/or advanced study programs.	27.388	NS
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	20.217	NS
ANALYZER OF STUDENT PROGRESS		
8-1 Provides relatively frequent assessment of student progress.	10.748	NS
8-2 Measures progress in terms of previously stated performance objectives.	12.890	NS
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	15.169	NS
8-4 Avoids using evaluative results to emphasize a student's inadequacies and shortcomings.	13.688	NS
8-5 Helps student understand and accept his/her achievements.	9.881	NS
8-6 Assists student in using evaluative data in planning future study.	31.549	.05*
8-7 Helps student develop an accurate self-appraisal.	34.823	.05**

*Chi-square test statistic is illustrated in Appendix D, Table II.
**Chi-square test statistic is illustrated in Appendix D, Table III.

Table 15, Continued

Activity	Chi-Sq.	Sign. Level
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS		
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	28.416	NS
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	15.471	NS
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	12.290	NS
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	13.991	NS
9-5 Arranges evaluative conferences between parents, students, employers, etc.	12.037	NS

College Enrollment

The second hypothesis tested the effect of community college enrollment on the opinions expressed by the instructors on the importance of the individualized instruction activities.

Based on student enrollment as previously defined, the 186 institutions were grouped as follows: 33 (17.7 percent) were small; 95 (51.1 percent) were medium-size; and 58 (31.2 percent) were large.

Significant differences between college enrollments in the instructors' opinions on the importance of the following five individualized instruction activities were found:

3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.

4-2 Makes available laboratory space for individuals and/or teams to carry out projects.

5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.

7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.

8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.

The null hypotheses that there are no differences between community college enrollments in the instructors' opinions on these five activities can be rejected. Thus, instructors from small, medium-size, and large public community colleges disagreed on the importance of these five activities.

Table 16 presents the chi-square value for each of the 54 individualized instruction activities.

Table 16

DIFFERENCES BETWEEN COMMUNITY COLLEGE ENROLLMENT IN INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Activity	Chi-Sq.	Sign. Level
ANALYZER OF INDIVIDUAL DIFFERENCES		
1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.	10.437	NS
1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics.	4.713	NS
1-3 Collects autobiographies, anecdotal records, and other information to help identify student differences.	10.459	NS
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	6.979	NS
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	9.054	NS
1-6 Diagnoses how each student learns best.	11.130	NS
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	12.816	NS
1-8 Discusses career goals with individual students.	9.308	NS
PLANNER OF COURSES, UNITS, AND LESSONS		
2-1 Develops course materials cooperatively with students.	8.564	NS

Table 16, Continued

Activity	Chi-Sq.	Sign. Level
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	8.598	NS
2-3 Allows for different rates of learning in developing course materials.	15.083	NS
2-4 Develops cooperatively with students the performance goals and outcomes expected for them in the course or units.	11.270	NS
2-5 Provides study guides that lead the student from one learning experience to another.	15.821	NS
2-6 Incorporates laboratory activities that complement the classroom work.	9.073	NS
2-7 Incorporates out-of-school learning experiences (i.e. work experience) into a student's study program.	5.842	NS
2-8 Designs curriculum to allow for self-instruction.	16.077	NS
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA		
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	6.382	NS
3-2 Prepares instructional materials needed by individual students.	7.472	NS
3-3 Assists students in preparation of instructional materials for their own use.	10.575	NS
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	25.207	.05*

*Chi-square test statistic is illustrated in Appendix D, Table IV.

Table 16, Continued

Activity	Chi-Sq.	Sign. Level
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	5.974	NS
ARRANGER OF INSTRUCTIONAL FACILITIES		
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	12.483	NS
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	21.350	.05*
4-3 Arranges for students to use selected school equipment away from school for instructional purposes.	14.014	NS
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	13.365	NS
4-5 Arranges with business and industry the proper facilities for a student to obtain work experience.	6.853	NS
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	7.241	NS
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES		
5-1 Conducts large group tours and field visitations.	3.845	NS
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	8.445	NS

*Chi-square test statistic is illustrated in Appendix D, Table V.

Table 16, Continued

Activity	Chi-Sq.	Sign. Level
5-3 Uses large group assemblies to collect and disseminate necessary information.	11.347	NS
5-4 Provides large groups with factual course content information of common interest to all.	11.235	NS
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	19.018	.05*
PROVIDER OF SMALL GROUP INSTRUCTION AND EXPERIENCES		
6-1 Orients students to small group learning methods.	8.918	NS
6-2 Varies the schedule to accommodate a variety of learning activities.	8.351	NS
6-3 Participates actively in certain small group activities.	11.306	NS
6-4 Reacts within groups as an equal.	15.627	NS
6-5 Removes himself/herself physically from certain small group activities.	8.352	NS
6-6 Accepts contributions from all group participants as being worthwhile.	13.058	NS
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES		
7-1 Orients students to independent study techniques.	14.066	NS
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	14.845	NS

*Chi-square test statistic is illustrated in Appendix D, Table VI.

Table 16, Continued

Activity	Chi-Sq.	Sign. Level
7-3 Assists student in assessing progress and in planning supporting and/or advanced study programs.	10.425	NS
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	20.263	.05*
ANALYZER OF STUDENT PROGRESS		
8-1 Provides relatively frequent assessment of study progress.	7.509	NS
8-2 Measures progress in terms of previously stated performance objectives.	8.577	NS
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	18.257	.05**
8-4 Avoids using evaluative results to emphasize a student's inadequacies and shortcomings.	8.437	NS
8-5 Helps student understand and accept his/her achievements.	10.293	NS
8-6 Assists student in using evaluative data in planning future study.	7.177	NS
8-7 Helps student develop an accurate self-appraisal.	12.535	NS

*Chi-square test statistic is illustrated in Appendix D, Table VII.
**Chi-square test statistic is illustrated in Appendix D, Table VIII.

Table 16, Continued

Activity	Chi-Sq.	Sign. Level
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS		
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	10.303	NS
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	16.487	NS
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	9.366	NS
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	7.057	NS
9-5 Arranges evaluative conferences between parents, students, employers, etc.	5.842	NS

Individualized Typewriting Instruction Experience

The third hypothesis was concerned with the effect of individualized typewriting instruction experience on the opinions expressed by the instructors on the importance of the individualized instruction activities.

Instructors were asked to indicate whether they had or had not taught typewriting using individualized instruction. Of the 186 instructors, 124 (66.7 percent) indicated experience in teaching typewriting using individualized instruction; 62 (33.3 percent) indicated no experience in teaching typewriting using individualized instruction.

Significant differences between individualized typewriting instruction experience in the instructors' opinions on the importance of the following two individualized instruction activities were found:

1-3 Collects autobiographies, anecdotal records, and other information to help identify student differences.

6-3 Participates actively in certain small group activities.

The null hypotheses that there are no differences between individualized typewriting instruction experience in the instructors' opinions of these two activities can be rejected. Instructors with individualized typewriting instruction experience and instructors without individualized typewriting instruction experience disagreed on the importance of these two activities.

Table 17 provides the chi-square value for each of the 54 individualized instruction activities.

Table 17

DIFFERENCES BETWEEN INDIVIDUALIZED TYPEWRITING TEACHING EXPERIENCE IN INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Activity	Chi-Sq.	Sign. Level
ANALYZER OF INDIVIDUAL DIFFERENCES		
1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.	4.758	NS
1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics.	2.406	NS
1-3 Collects autobiographies, anecdotal records, and other information to help identify student differences.	11.449	.05*
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	5.346	NS
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	3.422	NS
1-6 Diagnoses how each student learns best.	4.081	NS
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	5.686	NS
1-8 Discusses career goals with individual students.	2.654	NS

*Chi-square test statistic is illustrated in Appendix D, Table IX.

Table 17, Continued

Activity	Chi-Sq.	Sign. Level
PLANNER OF COURSES, UNITS, AND LESSONS		
2-1 Develops course materials cooperatively with students.	5.865	NS
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	5.764	NS
2-3 Allows for different rates of learning in developing course materials.	6.035	NS
2-4 Develops cooperatively with students the performance goals and outcomes expected for them in the course or units.	8.770	NS
2-5 Provides study guides that lead the student from one learning experience to another.	2.685	NS
2-6 Incorporates laboratory activities that complement the classroom work.	4.609	NS
2-7 Incorporates out-of-school learning experiences (i.e. work experience) into a student's study program.	2.549	NS
2-8 Designs curriculum to allow for self-instruction.	7.119	NS
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA		
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	5.250	NS
3-2 Prepares instructional materials needed by individual students.	2.618	NS
3-3 Assists students in preparation of instructional materials for their own use.	2.829	NS

Table 17, Continued

Activity	Chi-Sq.	Sign. Level
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	4.523	NS
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	1.221	NS
ARRANGER OF INSTRUCTIONAL FACILITIES		
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	1.769	NS
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	2.928	NS
4-3 Arranges for students to use selected school equipment away from school for instructional purposes.	2.897	NS
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	8.440	NS
4-5 Arranges with business and industry the proper facilities for a student to obtain work experience.	4.279	NS
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	4.214	NS
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES		
5-1 Conducts large group tours and field visitations.	2.545	NS

Table 17, Continued

Activity	Chi-Sq.	Sign. Level
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	3.876	NS
5-3 Uses large group assemblies to collect and disseminate necessary information.	4.207	NS
5-4 Provides large groups with factual course content information of common interest to all.	4.807	NS
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	6.552	NS
PROVIDER OF SMALL GROUP INSTRUCTION AND EXPERIENCES		
6-1 Orients students to small group learning methods.	4.261	NS
6-2 Varies the schedule to accommodate a variety of learning activities.	4.893	NS
6-3 Participates actively in certain small group activities.	11.337	.05*
6-4 Reacts within groups as an equal.	1.636	NS
6-5 Removes himself/herself physically from certain small group activities.	9.153	NS
6-6 Accepts contributions from all group participants as being worthwhile.	5.235	NS
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES		
7-1 Orients students to independent study techniques.	2.330	NS

*Chi-square test statistic is illustrated in Appendix D, Table X.

Table 17, Continued

Activity	Chi-Sq.	Sign. Level
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	3.609	NS
7-3 Assists student in assessing progress and in planning supporting and/or advanced study programs.	4.790	NS
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	3.669	NS
ANALYZER OF STUDENT PROGRESS		
8-1 Provides relatively frequent assessment of student progress.	4.734	NS
8-2 Measures progress in terms of previously stated performance objectives.	6.524	NS
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	2.655	NS
8-4 Avoids using evaluative results to emphasize a student's inadequacies and shortcomings.	7.145	NS
8-5 Helps student understand and accept his/her achievements.	2.129	NS
8-6 Assists student in using evaluative data in planning future study.	2.895	NS
8-7 Helps student develop an accurate self-appraisal.	3.432	NS
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS		
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	7.272	NS

Table 17, Continued

Activity	Chi-Sq.	Sign. Level
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	3.803	NS
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	2.929	NS
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	2.072	NS
9-5 Arranges evaluative conferences between parents, students, employers, etc.	4.271	NS

Geographic Region

The last hypothesis was concerned with the effect of geographic region on the opinions expressed by the instructors' on the importance of the individualized instruction activites.

Using the five regions of the National Business Education Association, the 186 respondents were grouped as follows: Eastern Region, 30 (16.1 percent); Southern Region, 46 (24.7 percent); North-Central, 45 (24.2 percent); Mountain-Plains Region, 27 (14.5 percent); and Western Region, 38 (20.4 percent).

Table 18 shows that no significant differences between geographic regions in the instructors' opinions on the importance of the 54 individualized instruction activities were found. Therefore, the null hypothesis that there are no differences between geographic regions in the instructors' opinions on the importance of these activites cannot be rejected. Instructors from the five regions were in agreement on the importance of all 54 individualized instruction activities.

Table 18

DIFFERENCES BETWEEN GEOGRAPHIC REGION IN INSTRUCTORS' OPINIONS ON THE IMPORTANCE OF SELECTED INDIVIDUALIZED INSTRUCTION ACTIVITIES

Activity	Chi-Sq.	Sign. Level
ANALYZER OF INDIVIDUAL DIFFERENCES		
1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.	10.968	NS
1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics.	11.346	NS
1-3 Collects autobiographies, anecdotal records, and other information to help identify student differences.	14.270	NS
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	22.786	NS
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	20.714	NS
1-6 Diagnoses how each student learns best.	19.329	NS
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	22.187	NS
1-8 Discusses career goals with individual students.	18.222	NS
PLANNER OF COURSES, UNITS, AND LESSONS		
2-1 Develops course materials cooperatively with students.	19.748	NS

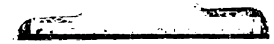

Table 18, Continued

Activity	Chi-Sq.	Sign. Level
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	25.192	NS
2-3 Allows for different rates of learning in developing course materials.	12.986	NS
2-4 Develops cooperatively with students the performance goals and outcomes expected for them in the course or units.	24.086	NS
2-5 Provides study guides that lead the student from one learning experience to another.	13.843	NS
2-6 Incorporates laboratory activities that complement the classroom work.	26.144	NS
2-7 Incorporates out-of-school learning experiences (i.e. work experiences) into a student's study program.	27.927	NS
2-8 Designs curriculum to allow for self-instruction.	18.978	NS
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA		
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	17.137	NS
3-2 Prepares instructional materials needed by individual students.	12.174	NS
3-3 Assists students in preparation of instructional materials for their own use.	17.179	NS
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	15.727	NS

Table 18, Continued

Activity	Chi-Sq.	Sign. Level
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	15.294	NS
ARRANGER OF INSTRUCTIONAL FACILITIES		
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	16.043	NS
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	27.160	NS
4-3 Arranges for students to use selected school equipment away from school for instructional purposes.	21.170	NS
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	24.995	NS
4-5 Arranges with business and industry the proper facilities for a student to obtain work experience.	23.499	NS
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	12.787	NS
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES		
5-1 Conducts large group tours and field visitations.	25.375	NS
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	20.312	NS
5-3 Uses large group assemblies to collect and disseminate necessary information.	12.709	NS

Table 18, Continued

Activity	Chi-Sq.	Sign. Level
5-4 Provides large groups with factual course content information of common interest to all.	19.924	NS
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	12.094	NS
PROVIDER OF SMALL GROUP INSTRUCTION AND EXPERIENCES		
6-1 Orients students to small group learning methods.	26.346	NS
6-2 Varies the schedule to accommodate a variety of learning activities.	30.206	NS
6-3 Participates actively in certain small group activities.	22.275	NS
6-4 Reacts within groups as an equal.	21.425	NS
6-5 Removes himself/herself physically from certain small group activities.	27.205	NS
6-6 Accepts contributions from all group participants as being worthwhile.	25.829	NS
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES		
7-1 Orients students to independent study techniques.	21.056	NS
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	13.520	NS
7-3 Assists student in assessing progress and in planning supporting and/or advanced study programs.	16.479	NS

Table 18, Continued

Activity	Chi-Sq.	Sign. Level
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	25.814	NS
ANALYZER OF STUDENT PROGRESS		
8-1 Provides relatively frequent assessment of student progress.	10.821	NS
8-2 Measures progress in terms of previously stated performance objectives.	10.309	NS
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	18.014	NS
8-4 Avoids using evaluative results to emphasize a student's inadequacies and shortcomings.	18.762	NS
8-5 Helps student understand and accept his/her achievements.	6.751	NS
8-6 Assists student in using evaluative data in planning future study.	25.843	NS
8-7 Helps student develop an accurate self-appraisal.	15.811	NS
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS		
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	22.028	NS
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	17.436	NS

Table 18, Continued

Activity	Chi-Sq.	Sign. Level
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	18.185	NS
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	22.909	NS
9-5 Arranges evaluative conferences between parents, students, employers, etc.	27.666	NS

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The Problem

The first purpose of this study was to help business education establish the present status on the use of individualized typewriting instruction in public community colleges in the United States. This study provided descriptive research in the area of individualized typewriting instruction that was not presently available.

A second purpose for this study was to provide teacher educators with information that will be useful in developing better teacher education programs. By identifying present perceptions and understandings that public community college typewriting instructors hold for their role in individualized instruction, teacher educators can prepare teachers to be more proficient and competent in the use of individualized instruction in typewriting.

Thus, the problem in this study was to (1) determine the extent that individualized instruction in typewriting is being used in public community colleges in the United States and (2) determine and compare the opinions of public community college typewriting instructors in the United States on the importance of selected activity in role areas for individualized instruction.

Research Procedures

The population for this study was a listing of 774 public community colleges in the United States which offered a secretarial program. This

list was compiled of public community colleges dually listed in the 1976 Community, Junior, and Technical College Directory and in Barron's Guide to the Two-Year Colleges, Volume II: Occupational Program Selector. A proportional sample of 250 public community colleges was randomly selected from this list.

A questionnaire was used to collect the data for this descriptive study. One typewriting instructor from each of the 250 public community colleges was surveyed. Part I of the questionnaire collected the necessary data pertaining to the respondent and the respondent's institution. Part II of the questionnaire was concerned with the respondent's opinion on the importance ("Very Important," "Important," "Undecided," "Somewhat Important," or "Not Important") of the 54 selected individualized instruction activities in the 9 role areas for individualized instruction.

Findings

The data presented in this study were compiled from the responses of the 186 public community college typewriting instructors (74.4 percent response) who returned the questionnaire sent to his/her respective institution.

A summary of findings relating to the specific research questions for this study is as follows:

1. What geographic region of public community colleges uses the most individualized instruction in typewriting?

> Of the 186 respondents, 101, or 54.3 percent, reported using individualized instruction in their typewriting program. The Western Region had the highest percentage of users; the Eastern Region had the lowest percentage of users. The percentage of users for these two Regions was 73.3 percent and 40.0 percent respectively.

2. Is the size of the student enrollment at a public community college a factor in whether it uses or does not use individualized instruction in the typewriting program?

> Large public community colleges had the highest percentage of users; 60.3 percent reported using individualized typewriting instruction. Small institutions had the lowest percentage of users; 51.5 percent.

3. Who is most responsible in the public community college for the decision to implement or to initiate the use of individualized instruction in typewriting?

> The majority of instructors, 59.4 percent, reported that the decision to use individualized typewriting instruction was made by the department faculty.

4. What approaches or methods of individualized typewriting instruction are being used in public community colleges?

> The most frequently used approach to individualized typewriting instruction was the audio-visual (e.g. slide-tape) approach; 59, or 58.4 percent, of the 101 instructors reported use of this approach. The least used approach was the videotape approach; only 6, or 5.9 percent, reported using this method.

5. What courses in the typewriting program in public community college use individualized instruction?

> Instructors, 92.1 percent, indicated that the course most often using individualized typewriting instruction was "Beginning Typewriting." Many instructors reported that individualized instruction was being used throughout their typewriting programs.

6. How do public community college typewriting instructors evaluate the success of individualized typewriting instruction in public community colleges?

> Overwhelmingly, the instructors expressed favorable evaluation on the success of individualized typewriting instruction in their institutions. Eighty-one of the 101 instructors, or 80.2 percent, evaluated their experience as "Very Successful" or "Successful." Only 4, or 4 percent, of the instructors indicated that using individualized typewriting instruction was "Not meeting anticipated expectations."

7. What importance do public community college typewriting instructors place on selected activities and on role areas in individualized typewriting instruction?

The five most important individualized instruction activities in the opinion of the instructors were:

9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.

8-1 Provides relatively frequent assessment of student progress.

8-2 Measures progress in terms of previously stated performance objectives.

1-1 Holds individual conferences with students to discuss problems, past achievements, and plans.

8-5 Helps student understand and accept his/her achievements.

The five least important individualized instruction activities in the opinion of the instructors were:

5-1 Conducts large group tours and field visitations.

4-3 Arranges for students to use selected school equipment away from school for instructional purposes.

5-3 Uses large group assemblies to collect and disseminate necessary information.

1-3 Collects autobiographies, anecdotal records, and other information to help assess student differences.

5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.

The most important role in individualized instruction in the opinion of the instructors was "Analyzer of Student Progress." The least important role in their opinion was "Provider of Large Group Instruction and Experiences."

A summary of findings relating to the testing of the null hypotheses using the chi-square test statistic (.05 level of significance) is as follows:

H_1. There are no significant differences between years of teaching experience in the opinions expressed by public community college type-

writing instructors on the importance of each activity in the role areas for individualized instruction.

Significant differences in the instructors' opinions on the importance of the following three individualized instruction activities were found:

6-4 Reacts within groups as an equal.

As the years of teaching experience increase, the importance of reacting within groups as an equal increases.

8-6 Assists student in using evaluative data in planning future study.

As the years of teaching experience increase, the importance of assisting students in using evaluative data in planning future study tends to increase.

8-7 Helps student develop an accurate self-appraisal.

As the years of teaching experience increase, the importance of helping students develop an accurate self-appraisal increases.

H_2. There are no significant differences between college enrollments in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

Significant differences in the instructors' opinions on the importance of the following five individualized instruction activities were found:

3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.

As community college enrollment increases, the importance of instructing students to operate audio-visual equipment for independent study and/or small group study increases.

4-2 Makes available laboratory space for individuals and/or teams to carry out projects.

As community college enrollment increases, the importance of making available laboratory space for individuals and/or teams to carry out projects increases.

5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.

As community college enrollment increases, the importance of designing group instruction so that it ultimately leads to small group and/or independent study activities tends to increase.

7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.

As community college enrollment increases, the importance of helping students arrange for use of instructional materials, equipment, or facilities needed for his/her study program decreases.

8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.

As community college enrollment increases, the importance of using assessment results to emphasize the student's progress, strengths, and accomplishments decreases.

H_3. There are no significant differences between experiences with individualized typewriting instruction in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

Significant differences in the instructors' opinions on the importance of the following two individualized instruction activities were found:

1-3 Collects autobiographies, anecdotal records, and other information to help identify student differences.

Instructors with individualized typewriting instruction experience felt collecting autobiographies, anecdotal records, and other information to help identify student differences was less important than did instructors without individualized typewriting instruction experience.

6-3 Participates actively in certain small group activities.

Instructors with individualized typewriting instruction experience felt participating actively in certain small group activities was more important than did instructors without individualized typewriting instruction experience.

H_4. There are no significant differences between geographic regions in the opinions expressed by public community college typewriting instructors on the importance of each activity in the role areas for individualized instruction.

> No significant differences between geographic regions in the instructors opinions on the importance of the 54 individualized instruction activities were found. Instructors from the five regions agreed on the importance of these activities.

CONCLUSIONS

Based on the findings of this study, the following conclusions were made:

1. Individualized instruction in typewriting appears to be an accepted and widely used instructional practice in public community colleges in the United States.

2. Years of teaching experience has little effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

3. College enrollment has little effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

4. Individualized typewriting instruction experience has little effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

5. Geographic region has no effect on the opinions expressed by public community college typewriting instructors on the importance of the individualized instruction activities.

RECOMMENDATIONS

The following recommendations are made:

1. That teacher educators in business education use the findings in this study to develop comprehensive teacher education programs that include individualized instruction teaching competency, as well as to develop in-service education programs to improve instructors' capabilities in individualized instruction.

2. That research be conducted to determine the extent that instructors using individualized typewriting instruction perform the selected individualized instruction activities.

3. That research be conducted to identify the importance of the selected individualized instruction activities as viewed by business education experts in the field of individualized instruction.

4. That research be conducted to redefine and identify individualized instruction activities that are essential to the instructor's role in individualized typewriting instruction.

5. That research be conducted to determine the operation of individualized typewriting instruction programs in public community colleges.

6. That further descriptive research be conducted to include secondary institutions, vocational-technical centers, private business schools, and four-year postsecondary institutions in order to determine the status of individualized typewriting instruction at all levels of business education.

7. That experimental research continue to compare individualized approaches to the traditional approach in order to determine typewriting instruction that best meets the needs of each individual student.

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APPENDIX A

PUBLIC COMMUNITY COLLEGES INCLUDED IN SAMPLE

Eastern Region (40)	Enrollment*
Connecticut (3)	
Housatonic Community College, Bridgeport, CT 06608	Medium
Middlesex Community College, Middletown, CT 06457	Medium
South Central Community College, New Haven, CT 06510	Medium
Delaware (2)	
Delaware Technical and Community College--Wilmington Campus, Wilmington, DE 19801	Small
Goldey Beacom College, Wilmington, DE 19808	Medium
Maine (1)	
University of Maine--Augusta Branch, Augusta, ME 04330	Medium
Maryland (4)	
Anne Arundel Community College, Arnold, MD 21012	Large
Charles County Community College, La Plata, MD 20646	Medium
Dundalk Community College, Baltimore, MD 21237	Medium
Garrett Community College, McHenry, MD 21541	Small
Massachusetts (6)	
Bristol Community College, Fall River, MA 02720	Medium
Mount Wachusett Community College, Gardner, MA 01440	Medium
North Shore Community College, Beverly, MA 01440	Medium
Northern Essex Community College, Haverhill, MA 01915	Large
Quinsigamond Community College, Worcester, MA 01606	Medium
Springfield Technical Community College, Springfield, MA 01105	Large
New Hampshire (1)	
New Hampshire Vocational Technical College--Berlin Campus, Berlin, NH 03570	Small
New Jersey (6)	
Bergen Community College, Paramus, NJ 07652	Large
Camden County College, Blackwood, NJ 08012	Large
Cumberland County College, Vineland, NJ 08360	Medium
Ocean County College, Toms River, NJ 08753	Medium
Passaic County Community College, Paterson, NJ 07505	Medium
Somerset County College, Somerville, NJ 08876	Medium

*Small -- less than 1,000 students

Medium -- 1,000 - 4,999 students

Large -- 5,000 or more students

Eastern Region (Continued)	Enrollment
New York (12)	
Columbia-Greene Community College, Hudson, NY 12534	Medium
Erie Community College--City Campus, Buffalo, NY 14209	Medium
Herkimer County Community College, Herkimer, NY 13350	Medium
Kingsborough Community College, Brooklyn, NY 11235	Large
Laguardia Community College, Long Island City, NY 11101	Medium
Nassau Community College, Garden City, NY 11530	Large
Niagara County Community College, Sanborn, NY 14132	Medium
Onondaga Community College, Syracuse, NY 13210	Large
Queensborough Community College, Bayside, NY 11364	Large
Rockland Community College, Suffern, NY 10901	Large
Suffolk County Community College, Seldon, NY 11784	Large
SUNY Agriculture and Technical College--Cobleskill Campus, Cobleskill, NY 12043	Medium
Pennsylvania (4)	
Bucks County Community College, Newtown, PA 18940	Large
Montgomery County Community College, Blue Bell, PA 19422	Large
Northampton County Area Community College, Bethlehem, PA 18017	Medium
Westmoreland County Community College, Youngwood, PA 15697	Medium
Rhode Island (1)	
Rhode Island Junior College, Warwick, RI 02886	Large
Southern Region (68)	
Alabama (6)	
Gadsden State Junior College, East Gadsden, AL 35903	Large
Jefferson State Junior College, Birmingham, AL 35215	Large
Lawson State Community College, Birmingham, AL 35211	Medium
Patrick Henry State Junior College, Monroeville, AL 36460	Small
S. D. Bishop State Junior College, Mobile, AL 36603	Medium
Wallace State Community College, Selma, AL 36701	Medium
Arkansas (1)	
Phillips County Community College, Helena, AR 72342	Medium
Florida (9)	
Central Florida Community College, Ocala, FL 32670	Medium
Edison Community College, Fort Myers, FL 33901	Medium
Hillsborough Community College, Tampa, FL 33622	Large
Miami-Dade Community College--Downtown Campus, Miami, FL 33132	Large
Miami-Dade Community College--South Campus, Miami, FL 33156	Large
Okaloosa-Walton Junior College, Niceville, FL 32578	Medium

Southern Region (Continued)	Enrollment
Pensacola Junior College, Pensacola, FL 32504	Large
Polk Community College, Winter Haven, FL 33880	Medium
Santa Fe Community College, Gainesville, FL 32601	Large
Georgia (3)	
Emanuel County Junior College, Swainsboro, GA 30401	Small
Gordon Junior College, Barnesville, GA 30204	Medium
South Georgia College, Douglas, GA 31533	Medium
Kentucky (6)	
Hazard Community College, Hazard, KY 41701	Small
Henderson Community College, Henderson, KY 42420	Small
Jefferson Community College, Louisville, KY 40201	Large
Lexington Technical Institute, Lexington, KY 40506	Medium
Prestonsburg Community College, Prestonsburg, KY 41653	Small
Southeast Community College, Cumberland, KY 40823	Small
Louisiana (1)	
Southern University--Shreveport-Bossier City Campus, Shreveport, LA 71107	Small
Mississippi (7)	
Hinds Junior College, Raymond, MS 39154	Large
Itawamba Junior College, Fulton, MS 38843	Medium
Mississippi Delta Junior College, Moorhead, MS 38761	Medium
Mississippi Gulf Coast Junior College--Jackson County Campus, Gautier, MS 39553	Medium
Northeast Mississippi Junior College, Booneville, MS 38829	Medium
Northwest Mississippi Junior College, Senatobia, MS 38668	Medium
Southwest Mississippi Junior College, Summit, MS 39666	Medium
North Carolina (16)	
Anson Technical Institute, Ansonville, NC 28007	Small
Asheville-Buncombe Technical Institute, Asheville, NC 28801	Medium
Bladen Technical Institute, Dublin, NC 28332	Small
Caldwell Community College and Technical Institute, Lenoir, NC 28645	Medium
Cape Fear Technical Institute, Wilmington, NC 28401	Small
Carteret Technical Institute, Morehead City, NC 28557	Small
Craven Community College, New Bern, NC 28560	Medium
Edgecombe Technical Institute, Tarboro, NC 27886	Small
Guilford Technical Institute, Jamestown, NC 27282	Medium
James Sprunt Institute, Kenansville, NC 28349	Small
Lenoir Community College, Kinston, NC 28501	Medium
Mayland Technical Institute, Spruce Pine, NC 28777	Small
McDowell Technical Institute, Marion, NC 28752	Small
Piedmont Technical Institute, Roxboro, NC 27573	Small
Randolph Technical Institute, Asheboro, NC 27203	Small
Technical Institute of Alamance, Burlington, NC 27215	Medium

Southern Region (Continued)	Enrollment
South Carolina (2)	
Florence-Darlington Technical College, Florence, SC 29501	Medium
Greenville Technical College, Greenville, SC 29606	Large
Tennessee (4)	
Cleveland State Community College, Cleveland, TN 37311	Medium
Dyersburg State Community College, Dyersburg, TN 38024	Medium
Motlow State Community College, Tullahoma, TN 37388	Medium
Roane State Community College, Harriman, TN 37748	Medium
Virginia (11)	
Central Virginia Community College, Lynchburg, VA 24502	Medium
Eastern Shore Community College, Melfa, VA 23410	Small
Germanna Community College, Locust Grove, VA 22508	Medium
J. Sargeant Reynolds Community College--Downtown Campus, Richmond, VA 23230	Large
New River Community College, Dublin, VA 24084	Medium
Patrick Henry Community College, Martinsville, VA 24112	Medium
Piedmont Virginia Community College, Charlottesville, VA 22901	Medium
Rappahannock Community College--South Campus, Glenns, VA 23149	Small
Richard Bland College, Petersburg, VA 23803	Medium
Southside Virginia Community College--Christanna Campus, Alberta, VA 23821	Small
Thomas Nelson Community College, Hampton, VA 23670	Medium
West Virginia (2)	
Fairmont Community College, Fairmont, WV 26554	Small
West Virginia Northern Community College--Wheeling Campus, Wheeling, WV 26003	Medium

North-Central Region (57)	
Illinois (13)	
Black Hawk College--Quad Cities Campus, Moline, IL 61265	Large
Carl Sandburg College, Galesburg, IL 61401	Medium
City Colleges of Chicago--Southwest College, Chicago, IL 60628	Large
City College of Chicago--Wilber Wright College, Chicago, IL 60634	Large
College of Lake County, Grayslake, IL 60030	Large
Kankakee Community College, Kankakee, IL 60901	Medium
Kishwaukee College, Malta, IL 60150	Medium
Lewis and Clark Community College, Godfrey, IL 62035	Large
Lincoln Trail College, Robinson, IL 62454	Medium
Oakton Community College, Morton Grove, IL 60053	Large
Parkland College, Champaign, IL 61820	Large
Prairie State College, Chicago Heights, IL 60411	Large
Sauk Valley College, Dixon, IL 61021	Medium

North-Central Region (Continued)	Enrollment
Indiana (2)	
Indiana Vocational Technical College--Terre Haute Campus, Terre Haute, IN 47802	Small
Vincennes University, Vincennes, IN 47591	Medium
Iowa (9)	
Des Moines Area Community College--Ankeny Campus, Ankeny, IA 50021	Medium
Clinton Community College, Clinton, IA 52732	Small
Indian Hills Community College--Ottumwa Campus, Ottumwa, IA 52501	Small
Iowa Central Community College--Fort Dodge Center, Fort Dodge, IA 50501	Medium
Iowa Western Community College--Council Bluffs Campus, Council Bluffs, IA 51501	Medium
Kirkwood Community College, Cedar Rapids, IA 52406	Medium
Marshalltown Community College, Marshalltown, IA 50158	Small
North Iowa Area Community College, Mason City, IA 50401	Medium
Western Iowa Tech Community College, Sioux City, IA 51106	Small
Michigan (10)	
Alpena Community College, Alpena, MI 49707	Medium
Charles Stewart Mott Community College, Flint, MI 48503	Large
Delta College, University Center, MI 48710	Large
Henry Ford Community College, Dearborn, MI 48128	Large
Kalamazoo Valley Community College, Kalamazoo, MI 49009	Large
Monroe County Community College, Monroe, MI 48161	Medium
North Central Michigan College, Petoskey, MI 49770	Medium
Oakland Community College--Auburn Hills Campus, Auburn Heights, MI 48057	Medium
Schoolcraft College, Livonia, MI 48151	Large
West Shore Community College, Scottville, MI 49454	Small
Minnesota (6)	
Anoka-Ramsey Community College, Coon Rapids, MN 55433	Medium
Fergus Falls Community College, Fergus Falls, MN 56537	Small
Hibbing Community College, Hibbing, MN 55746	Small
Inver Hills Community College, Inver Grove Heights, MN 55075	Medium
North Hennepin Community College, Brooklyn Park, MN 55445	Medium
Rainy River Community College, International Falls, MN 56649	Small
Missouri (5)	
East Central Junior College, Union, MO 63084	Medium
Florissant Valley Community College, St. Louis, MO 63135	Large
Maple Woods Community College, Kansas City, MO 64156	Medium
Mineral Area College, Flat River, MO 63601	Medium
Three Rivers Community College, Poplar Bluff, MO 63901	Medium

North-Central Region (Continued)	Enrollment
Ohio (10)	
Cincinnati Technical College, Cincinnati, OH 45223	Medium
Clark Technical College, Springfield, OH 45505	Medium
Columbus Technical Institute, Columbus, OH 43216	Medium
Cuyahoga Community College--Metropolitan Campus, Cleveland, OH 44115	Large
Lakeland Community College, Mentor, OH 44060	Large
Lima Technical College, Lima, OH 45801	Small
Lorain County Community College, Elyria, OH 44035	Large
Marion Technical College, Marion, OH 43302	Small
Michael J. Owens Technical College, Toledo, OH 43699	Medium
Tri-County Academic Center, Sardinia, OH 45171	Small
Wisconsin (2)	
District One Technical Institute, Eau Claire, WI 54701	Medium
Western Wisconsin Technical Institute, La Crosse, WI 54601	Large

Mountain-Plains Region (35)	
Colorado (4)	
Arapahoe Community College, Littleton, CO 80120	Medium
Community College of Denver--Red Rocks Campus, Golden, CO 80401	Large
El Paso Community College, Colorado Springs, CO 80904	Large
Northeastern Junior College, Sterling, CO 80751	Medium
Kansas (6)	
Butler County Community Junior College, El Dorado, KS 67042	Medium
Cloud County Community Junior College, Concordia, KS 66901	Medium
Colby Community College, Colby, KS 67701	Medium
Johnson County Community Junior College, Overland Park, KS 66210	Large
Neosho County Community Junior College, Chanute, KS 66720	Small
Seward County Community College, Liberal, KS 67901	Small
Nebraska (3)	
Central Technical Community College, Hastings, NE 68901	Medium
Metropolitan Technical Community College, Omaha, NE 68137	Medium
Southeast Community College--Lincoln Campus, Lincoln, NE 68506	Small
New Mexico (1)	
New Mexico State University--San Jaun Campus, Farmington, NM 87401	Small

Mountain-Plains Region (Continued)	Enrollment
North Dakota (2)	
Lake Region Junior College, Devils Lake, ND 58301	Small
North Dakota State School of Science, Wahpeton, ND 58075	Medium
Oklahoma (4)	
Connors State College, Warner, OK 74469	Medium
Murray State College, Tishomingo, OK 73460	Medium
Oscar Rose Junior College, Midwest City, OK 73110	Large
Seminole Junior College, Seminole, OK 74868	Medium
Texas (12)	
Alvin Community College, Alvin, TX 77511	Medium
Cooke County College, Gainesville, TX 76240	Medium
El Centro College, Dallas, TX 75202	Large
Kilgore College, Kilgore, TX 75662	Medium
McLennan Community College, Waco, TX 76708	Medium
Navarro College, Corsicana, TX 75110	Medium
Odessa College, Odessa, TX 79760	Medium
Panola Junior College, Carthage, TX 75633	Small
Ranger Junior College, Ranger, TX 76470	Small
St. Phillip's College, San Antonio, TX 78203	Large
Tarrant County Junior College--Northeast Campus, Hurst, TX 76053	Large
Western Texas College, Snyder, TX 79549	Medium
Wyoming (3)	
Central Wyoming College, Riverton, WY 82501	Small
Laramie County Community College, Cheyenne, WY 82001	Medium
Northwest Community College, Powell, WY 82435	Medium
Western Region (50)	
Alaska (3)	
Anchorage Community College, Anchorage, AK 99504	Large
Kodiak Community College, Kodiak, AK 99615	Small
Tanana Valley Community College, Fairbanks, AK 99701	Medium
Arizona (5)	
Cochise College, Douglas, AZ 85607	Medium
Glendale Community College, Glendale, AZ 85302	Large
Scottsdale Community College, Scottsdale, AZ 85252	Large
Navajo Community College, Chinle, AZ 86503	Small
Pima Community College, Tucson, AZ 85709	Large
California (23)	
Bakersfield College, Bakersfield, CA 93305	Large
Canada College, Redwood City, CA 94061	Large
Chabot College, Hayward, CA 94545	Large
College of San Mateo, San Mateo, CA 94402	Large

Western Region (Continued)	Enrollment
College of the Sequoias, Visalia, CA 93277	Large
Consumnes River College, Sacramento, CA 95823	Medium
Crafton Hills College, Yucaipa, CA 92399	Medium
Cuesta College, San Luis Obispo, CA 93406	Large
Diablo Valley College, Pleasant Hill, CA 94523	Large
Feather River College, Quincy, CA 95971	Medium
Imperial Valley College, Imperial, CA 92251	Medium
Mendocino College, Ukiah, CA 95482	Medium
Modesto Junior College, Modesto, CA 95350	Large
Mt. San Jacinto College, San Jacinto, CA 92383	Medium
Orange Coast College, Costa Mesa, CA 92626	Large
Palo Verde College, Blythe, CA 92225	Small
Pasadena City College, Pasadena, CA 91106	Large
Riverside City College, Riverside, CA 92506	Large
Santa Barbara City College, CA 93109	Large
Shasta College, Redding, CA 96001	Large
Sierra College, Rocklin, CA 95677	Large
Skyline College, San Bruno, CA 94066	Large
Victor Valley College, Victorville, CA 92392	Medium
Hawaii (1)	
Maui Community College, Kahului, HI 96732	Medium
Idaho (1)	
College of Southern Idaho, Twin Falls, ID 83301	Medium
Montana (1)	
Flathead Valley Community College, Kalispell, MT 59901	Medium
Nevada (1)	
Northern Nevada Community College, Elko, NV 89801	Small
Oregon (6)	
Clackamas Community College, Oregon City, OR 97045	Medium
Lane Community College, Eugene, OR 97405	Large
Mt. Hood Community College, Gresham, OR 97030	Large
Portland Community College, Portland, OR 97219	Large
Rogue Community College, Grants Pass, OR 97526	Medium
Umpqua Community College, Roseburg, OR 97470	Medium
Utah (1)	
Snow College, Ephraim, UT 84627	Small
Washington (8)	
Big Bend Community College, Moses Lake, WA 98837	Medium
Green River Community College, Auburn, WA 98002	Large
North Seattle Community College, Seattle, WA 98103	Large
Olympia Vocational Technical Institute, Olympia, WA 98502	Medium
Peninsula College, Port Angeles, WA 98362	Medium

Western Region (Continued)	Enrollment
Shoreline Community College, Seattle, WA 98133	Large
Spokane Community College, Spokane, WA 99202	Large
Yakima Valley College, Yakima, WA 98902	Medium

Small	(49)
Medium	(125)
Large	(76)
Total	(250)

APPENDIX B

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

January 3, 1977

Dear Business Educator:

We need your assistance.

In an attempt to answer a number of questions concerning the individualizing of typewriting instruction at two-year colleges, we are undertaking a nationwide study of community, junior, and technical college typewriting instructors. Perhaps more important, you can help to plan and develop better teacher education programs, as well as teacher in-service programs.

Individualized typewriting instruction is of great interest and concern to both the administrator and the instructor. Both are seeking answers to such questions as "Are typewriting instructors using individualized typewriting instruction?," "Who is most responsible for the decision to implement individualized typewriting instruction?," and "What is the role of the instructor in individualized typewriting instruction?"

Please participate in our study by completing this questionnaire. Feel free to answer all questions openly as your responses will be treated confidentially. We look forward to receiving your early reply in the enclosed return envelope.

In order to share the findings of this study with you and other business educators, the results will be submitted for publication in the professional literature.

Your time and thought in answering the questionnaire are greatly appreciated.

Sincerely,

Stephen Blucas
Researcher

Robert Poland
Robert Poland, Professor
Business and Distributive Education

Enclosures

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

January 27, 1977

Dear Department Head:

Recently your department was mailed a questionnaire addressed to "Typewriting Instructor" seeking information for a nationwide study of typewriting instruction in two-year colleges. More specifically, we are seeking answers to such questions as "Are typewriting instructors using individualized typewriting instruction?," "Who is most responsible for the decision to implement individualized typewriting instruction?," and "What is the role of the instructor in individualized typewriting instruction?"

Since we have not yet received a response from your department, another copy of the questionnaire is enclosed. We are asking you to please forward this questionnaire to an instructor in your department who is currently teaching typewriting.

Your cooperation will be appreciated.

Sincerely,

Stephen Blucas

Stephen Blucas
Researcher

Robert Poland

Robert Poland, Professor
Business and Distributive Education

Enclosures

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

January 27, 1977

Dear Business Educator:

We need your assistance.

In an attempt to answer a number of questions concerning the individualizing of typewriting instruction at two-year colleges, we are undertaking a nationwide study of community, junior, and technical college typewriting instructors. Perhaps more important, you can help to plan and develop better teacher education programs, as well as teacher in-service programs.

Individualized typewriting instruction is of great interest and concern to both the administrator and the instructor. Both are seeking answers to such questions as "Are typewriting instructors using individualized typewriting instruction?," "Who is most responsible for the decision to implement individualized typewriting instruction?," and "What is the role of the instructor in individualized typewriting instruction?"

Please participate in our study by completing this questionnaire. Feel free to answer all questions openly as your responses will be treated confidentially. We look forward to receiving your reply by February 11, 1977. A return envelope is enclosed.

In order to share the findings of this study with you and other business educators, the results will be submitted for publication in the professional literature.

Your time and thought in answering the questionnaire are greatly appreciated.

Sincerely,

Stephen Blucas

Stephen Blucas
Researcher

Robert Poland

Robert Poland, Professor
Business and Distributive Education

Enclosures

TYPEWRITING INSTRUCTION IN COMMUNITY, JUNIOR, AND TECHNICAL COLLEGES

PART I. In order to properly evaluate your responses, it is necessary to collect certain information regarding the background and experiences of the respondent. Please check the following items as appropriate.

Sex:
( ) Male
( ) Female

Age:
( ) 25 or under
( ) 26 - 35
( ) 36 - 45
( ) 46 - 55
( ) 56 or older

Level of Education:
( ) less than Baccalaureate
( ) Baccalaureate
( ) Masters
( ) Specialist
( ) Doctorate

Total years of full-time teaching experience:
( ) 3 years or less
( ) 4 - 7 years
( ) 8 - 11 years
( ) 12 - 15 years
( ) over 15 years

Total years of full-time, two-year college, teaching experience:
( ) 3 years or less
( ) 4 - 7 years
( ) 8 - 11 years
( ) 12 - 15 years
( ) over 15 years

The following definition is included to aid you in completing the following questions:

INDIVIDUALIZED TYPEWRITING INSTRUCTION: a method of typewriting instruction providing each learner with one or more of the following: individually prescribed learning activities and/or individually paced learning and/or individual evaluation of learner achievement.

Have you taught, or are you presently teaching, using individualized typewriting instruction?
( ) Yes
( ) No

Does your department use individualized instruction in the typewriting program?
( ) Yes
( ) No

If No, please continue to PART II.

What approach best describes your department's use of individualized typewriting instruction? (Check more than one response if appropriate.)

( ) Videotape--providing the learner with televised videotaped sequences for specific learning.

( ) Learning Activity Package--gathering all the learning materials into carefully designed stand-alone, printed packages.

( ) Programmed Textbook--leading the student to interact with a series of stimuli, each requiring an active response.

( ) Contract--developing cooperatively a contract between the student and the instructor specifying outcomes, evaluation, and time for completion.

( ) Audio (e.g. cassette)--using an audio message, not visual, as the main element of instruction along with other activities.

( ) Audio-Visual (e.g. slide-tape)--leading the student through a series of learning activities which may include audio, visual, workbook, and lab activities.

( ) Other _____

What courses in your department's typewriting program use individualized instruction?
( ) Beginning Typewriting
( ) Intermediate Typewriting
( ) Advanced Typewriting
( ) Other _____

Who was most responsible for the decision to implement individualized instruction in your department's typewriting program?
( ) Department faculty
( ) Department chairman
( ) Instructional media personnel
( ) College administration other than department chairman
( ) Other _____

Comments: _____

_____

_____

How would you evaluate your department's use of individualized typewriting instruction in terms of meeting students' needs and in terms of students' achievements?

( ) Very successful
( ) Successful
( ) Somewhat successful
( ) Not meeting anticipated expectations

Comments: _____

_____

_____

PART II. The following is a list of selected activities in individualized instruction. Using the scale provided, please indicate your opinion concerning the importance of each of these activities regardless of whether it is or it is not currently incorporated into your department's typewriting program.

Please record your answer (only one response) by circling the appropriate number in the column to the right of each activity.

1 Not Important--an activity you believe need not be performed in individualized typewriting instruction.

2 Somewhat Important--an activity you believe could be desirable, but is not helpful, in individualized typewriting instruction.

3 Undecided--an activity you are not sure whether it should or it should not be performed in individualized typewriting instruction.

4 Important--an activity you believe to be helpful, but not essential in individualized typewriting instruction.

5 Very Important--an activity you believe to be essential in individualized typewriting instruction.

ANALYZER OF INDIVIDUAL DIFFERENCES

1-1 Holds individual conferences with students to discuss problems, past achievements, and plans. 1 2 3 4 5

1-2 Seeks clues from cumulative records, test scores, and past achievement to help identify student's needs and characteristics. 1 2 3 4 5

	Not Important	Somewhat Important	Undecided	Important	Very Important
1-3 Collects autobiographies, anecdotal records, and other information to help assess student differences.	1	2	3	4	5
1-4 Keeps a personal file on each student's achievements, actions, interests, and problems.	1	2	3	4	5
1-5 Uses placement tests to determine the appropriate levels of entrance into courses for each student.	1	2	3	4	5
1-6 Diagnoses how each student learns best.	1	2	3	4	5
1-7 Observes student's actions in class, in small groups, and in independent work to help identify his/her characteristics.	1	2	3	4	5
1-8 Discusses career goals with individual students.	1	2	3	4	5
PLANNER OF COURSES, UNITS, AND LESSONS					
2-1 Develops course materials cooperatively with students.	1	2	3	4	5
2-2 Incorporates various kinds of learning activities to accommodate different learning styles.	1	2	3	4	5
2-3 Allows for different rates of learning in developing course materials.	1	2	3	4	5
2-4 Develops cooperatively with students the performance goals and outcomes expected for them from the course or units.	1	2	3	4	5
2-5 Provides study guides that lead the student from one learning experience to another.	1	2	3	4	5
2-6 Incorporates laboratory activities that complement the classroom work.	1	2	3	4	5
2-7 Incorporates out-of-school learning experiences (i.e. work experience) into a student's study program.	1	2	3	4	5
2-8 Designs curriculum to allow for self-instruction.	1	2	3	4	5

	Not Important	Somewhat Important	Undecided	Important	Very Important
PROVIDER OF INSTRUCTIONAL MATERIALS AND MEDIA					
3-1 Maintains an up-to-date supply of texts, bulletins, and other reference materials for student use.	1	2	3	4	5
3-2 Prepares instructional materials needed by individual students.	1	2	3	4	5
3-3 Assists students in preparation of instructional materials for their own use.	1	2	3	4	5
3-4 Instructs students to operate audio-visual equipment for independent study and/or small group study.	1	2	3	4	5
3-5 Maintains a curriculum file, open to the students, of articles, bulletins, study guides, etc.	1	2	3	4	5
ARRANGER OF INSTRUCTIONAL FACILITIES					
4-1 Modifies classroom to accommodate groups or other variations in class arrangement.	1	2	3	4	5
4-2 Makes available laboratory space for individuals and/or teams to carry out projects.	1	2	3	4	5
4-3 Arranges for students to use selected school equipment away from school for instructional purposes.	1	2	3	4	5
4-4 Arranges for students' learning experiences away from school, i.e. visitations.	1	2	3	4	5
4-5 Arranges with business and industry the proper facilities for a student to obtain work experience.	1	2	3	4	5
4-6 Arranges simulated work experience situations for students unable to be placed in real work situations.	1	2	3	4	5
PROVIDER OF LARGE GROUP INSTRUCTION AND EXPERIENCES					
5-1 Conducts large group tours and field visitations.	1	2	3	4	5
5-2 Uses large groups as audiences for reports and presentations of activities developed in small groups and/or through independent study.	1	2	3	4	5

	Not Important	Somewhat Important	Undecided	Important	Very Important
5-3 Uses large group assemblies to collect and disseminate necessary information.	1	2	3	4	5
5-4 Provides large groups with factual course content information of common interest to all.	1	2	3	4	5
5-5 Designs group instruction so that it ultimately leads to small group and/or independent study activities.	1	2	3	4	5
PROVIDER OF SMALL GROUP INSTRUCTION AND EXPERIENCES					
6-1 Orients students to small group learning methods.	1	2	3	4	5
6-2 Varies the schedule to accommodate a variety of learning activities.	1	2	3	4	5
6-3 Participates actively in certain small group activities.	1	2	3	4	5
6-4 Reacts within groups as an equal.	1	2	3	4	5
6-5 Removes himself/herself physically from certain small group activities.	1	2	3	4	5
6-6 Accepts contributions from all group participants as being worthwhile.	1	2	3	4	5
SUPERVISOR OF INDEPENDENT STUDY EXPERIENCES					
7-1 Orients students to independent study techniques.	1	2	3	4	5
7-2 Arranges independent study for individuals as they exhibit the need and interest for it.	1	2	3	4	5
7-3 Assists student in assessing progress and in planning supporting and/or advanced study.	1	2	3	4	5
7-4 Helps student arrange for use of instructional materials, equipment, or facilities needed for his/her study program.	1	2	3	4	5
ANALYZER OF STUDENT PROGRESS					
8-1 Provides relatively frequent assessments of student progress.	1	2	3	4	5

	Not Important	Somewhat Important	Undecided	Important	Very Important
8-2 Measures progress in terms of previously stated performance objectives.	1	2	3	4	5
8-3 Uses assessment results to emphasize the student's progress, strengths, and accomplishments.	1	2	3	4	5
8-4 Avoids using evaluative results to emphasize a student's inadequacies and shortcomings.	1	2	3	4	5
8-5 Helps student understand and accept his/her achievements.	1	2	3	4	5
8-6 Assists student in using evaluative data in planning future study.	1	2	3	4	5
8-7 Helps student develop an accurate self-appraisal.	1	2	3	4	5
COMMUNICATOR OF INFORMATION TO SIGNIFICANT OTHERS					
9-1 Relates students' needs for changes in department policies and practices that affect learning to the administration.	1	2	3	4	5
9-2 Assists administration in focusing public attention on students' needs and accomplishments.	1	2	3	4	5
9-3 Seeks from college administration the required facilities, equipment, and materials needed for effective learning to take place.	1	2	3	4	5
9-4 Makes arrangements with college administration for activities not regularly scheduled, i.e. visitations.	1	2	3	4	5
9-5 Arranges evaluative conferences between parents, students, employers, etc.	1	2	3	4	5

THANK YOU VERY MUCH FOR YOUR COOPERATION!

Please return survey to: Stephen P. Blucas
321 Erickson Hall
Michigan State University
East Lansing, MI 48824

APPENDIX C

PUBLIC COMMUNITY COLLEGES INCLUDED IN PILOT STUDY

Eastern Region (4)	Enrollment*
Connecticut (1)	
Manchester Community College, Manchester, CT 06040	Large
Massachusetts (1)	
Newton Junior College, Newtonville, MA 02160	Small
New Jersey (1)	
Atlantic Community College, Mays Landing, NJ 08330	Medium
New York (1)	
Sullivan County Community College, Loch Sheldrake, NY 12759	Medium
Southern Region (7)	
Florida (1)	
South Florida Junior College, Avon Park, FL 33825	Small
Georgia (1)	
Kennesaw Junior College, Marietta, GA 30061	Medium
Mississippi (2)	
Holmes Junior College, Goodman, MS 39079	Medium
Meridan Junior College, Meridan, MS 39301	Medium
North Carolina (1)	
Fayetteville Technical Institute, Fayetteville, NC 28303	Medium
Virginia (2)	
John Tyler Community College, Chester, VA 23831	Medium
Lord Fairfax Community College, Middletown, VA 22645	Medium
North-Central Region (6)	
Illinois (2)	
Danville Junior College, Danville, IL 61832	Medium
Shawnee Community College, Ullin, IL 62992	Medium

*Small -- less than 1,000 students

Medium -- 1,000 - 4,999 students

Large -- 5,000 or more students

North-Central Region (Continued)	Enrollment
Indiana (1)	
Indiana Vocational-Technical College--Columbus Campus, Columbus, IN 47201	Small
Michigan (1)	
Oakland Community College--Southeast Campus, Oak Park, MI 48237	Medium
Ohio (1)	
Youngstown State University--Technical and Community College, Youngstown, OH 44555	Medium
Wisconsin (1)	
Moraine Park Technical Institute--Fond Du Lac Campus, Fond Du Lac, WI 54935	Medium
Mountain-Plains Region (3)	
North Dakota (1)	
North Dakota State University--Bottineau Campus, Bottineau, ND 58318	Small
Oklahoma (1)	
Claremore Junior College, Claremore, OK 74017	Medium
Texas (1)	
Paris Junior College, Paris, TX 75460	Medium
Western Region (5)	
Arizona (1)	
Arizona Western College, Yuma, AZ 85364	Medium
California (2)	
Columbia Junior College, Columbia, CA 95310	Medium
East Los Angeles College, Los Angeles, CA 90022	Large
Oregon (1)	
Treasure Valley Community College, Ontario, OR 97914	Medium
Utah (1)	
Dixie College, St. George, UT 84770	Medium

Small	(4)
Medium	(19)
Large	(2)
Total	(25)

APPENDIX D

TABLE I

DIFFERENCES BETWEEN TEACHING EXPERIENCE [AND] 6-4 REACTS WITHIN GROUPS AS AN EQUAL

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	1	4	0	4	9	0	18
Row Percent	5.6	22.2	0	22.2	50.0	0	9.7
Column Percent	33.3	16.0	0	8.5	18.8	0	
Percent of Total	.5	2.2	0	2.2	4.8	0	
4 - 7 YEARS							
Frequency	0	2	4	12	7	12	37
Row Percent	0	5.4	10.8	32.4	18.9	32.4	19.9
Column Percent	0	8.0	18.2	25.5	14.6	29.3	
Percent of Total	0	1.1	2.2	6.5	3.8	6.5	
8 - 11 YEARS							
Frequency	0	7	7	5	12	9	40
Row Percent	0	17.5	17.5	12.5	30.0	22.5	21.5
Column Percent	0	28.0	31.8	10.6	25.0	22.0	
Percent of Total	0	3.8	3.8	2.7	6.5	4.8	

(Continued)

TABLE 1, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	0	3	9	7	9	28
Row Percent	0	0	10.7	32.1	25.0	32.1	15.1
Column Percent	0	0	13.6	19.1	14.6	22.0	
Percent of Total	0	0	1.6	4.8	3.8	4.8	
OVER 15 YEARS							
Frequency	2	12	8	17	13	11	63
Row Percent	3.2	19.0	12.7	27.0	20.6	17.5	33.9
Column Percent	66.7	48.0	36.4	36.2	27.1	26.8	
Percent of Total	1.1	6.5	4.3	9.1	7.0	5.9	
Column Total	3	25	22	47	48	41	186
	1.6	13.4	11.8	25.3	25.8	22.0	100.0

RAW CHI SQUARE = 33.60751 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0289

TABLE II

DIFFERENCES BETWEEN TEACHING EXPERIENCE [AND] 8-6 ASSISTS STUDENT IN USING EVALUATIVE DATA IN PLANNING FUTURE STUDY

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	1	2	0	1	8	6	18
Row Percent	5.6	11.1	0	5.6	44.4	33.3	9.7
Column Percent	50.0	100.0	0	16.7	11.1	6.1	
Percent of Total	.5	1.1	0	.5	4.3	3.2	
4 - 7 YEARS							
Frequency	0	0	1	1	15	20	37
Row Percent	0	0	2.7	2.7	40.5	54.1	19.9
Column Percent	0	0	20.0	16.7	20.8	20.2	
Percent of Total	0	0	.5	.5	8.1	10.8	
8 - 11 YEARS							
Frequency	0	0	0	2	14	24	40
Row Percent	0	0	0	5.0	35.0	60.0	21.5
Column Percent	0	0	0	33.3	19.4	24.2	
Percent of Total	0	0	0	1.1	7.5	12.9	

(Continued)

TABLE 11, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	0	1	1	14	12	28
Row Percent	0	0	3.6	3.6	50.0	42.9	15.1
Column Percent	0	0	20.0	16.7	19.4	12.1	
Percent of Total	0	0	.5	.5	7.5	6.5	
OVER 15 YEARS							
Frequency	1	0	3	1	21	37	63
Row Percent	1.6	0	4.8	1.6	33.3	58.7	33.9
Column Percent	50.0	0	60.0	16.7	29.2	37.4	
Percent of Total	.5	0	1.6	.5	11.3	19.9	
Column Total	2	2	5	6	72	99	186
	1.1	1.1	2.7	3.2	38.7	53.2	100.0

RAW CHI SQUARE = 31.54874 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0484

TABLE III

DIFFERENCES BETWEEN TEACHING EXPERIENCE [AND] 8-7 HELPS STUDENT DEVELOP AN ACCURATE SELF-APPRAISAL

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	1	0	1	1	7	8	18
Row Percent	5.6	0	5.6	5.6	38.9	44.4	9.7
Column Percent	50.0	0	25.0	20.0	12.1	6.9	
Percent of Total	.5	0	.5	.5	3.8	4.3	
4 - 7 YEARS							
Frequency	0	1	2	0	17	17	37
Row Percent	0	2.7	5.4	0	45.9	45.9	19.9
Column Percent	0	100.0	50.0	0	29.3	14.7	
Percent of Total	0	.5	1.1	0	9.1	9.1	
8 - 11 YEARS							
Frequency	0	0	0	1	9	30	40
Row Percent	0	0	0	2.5	22.5	75.0	21.5
Column Percent	0	0	0	20.0	15.5	25.9	
Percent of Total	0	0	0	.5	4.8	16.1	

(Continued)

TABLE III, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	0	1	3	10	14	28
Row Percent	0	0	3.6	10.7	35.7	50.0	15.1
Column Percent	0	0	25.0	60.0	17.2	12.1	
Percent of Total	0	0	.5	1.6	5.4	7.5	
OVER 15 YEARS							
Frequency	1	0	0	0	15	47	63
Row Percent	1.6	0	0	0	23.8	74.6	33.9
Column Percent	50.0	0	0	0	25.9	40.5	
Percent of Total	.5	0	0	0	8.1	25.3	
Column Total	2	1	4	5	58	116	186
	1.1	.5	2.2	2.7	31.2	62.4	100.0

RAW CHI SQUARE = 34.82309 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0211

TABLE IV

DIFFERENCES BETWEEN COLLEGE ENROLLMENT [AND] 3-4 INSTRUCTS STUDENTS TO OPERATE AUDIO-VISUAL EQUIPMENT FOR INDEPENDENT STUDY AND/OR SMALL GROUP STUDY

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SMALL (less than 1,000)							Row Total
Frequency	0	3	5	6	10	9	33
Row Percent	0	9.1	15.2	18.2	30.3	27.3	17.7
Column Percent	0	30.0	35.7	50.0	23.8	8.4	
Percent of Total	0	1.6	2.7	3.2	5.4	4.8	
MEDIUM-SIZE (1,000 - 4,999)							
Frequency	1	4	5	5	24	56	95
Row Percent	1.1	4.2	5.3	5.3	25.3	58.9	51.1
Column Percent	100.0	40.0	35.7	41.7	57.1	52.3	
Percent of Total	.5	2.2	2.7	2.7	12.9	30.1	
LARGE (5,000 or more)							
Frequency	0	3	4	1	8	42	58
Row Percent	0	5.2	6.9	1.7	13.8	72.4	31.2
Column Percent	0	30.0	28.6	8.3	19.0	39.3	
Percent of Total	0	1.6	2.2	.5	4.3	22.6	

(Continued)

TABLE IV, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
							Row Total
Column Total	1 .5	10 5.4	14 7.5	12 6.5	42 22.6	107 57.5	186 100.0

RAW CHI SQUARE = 25.20708 WITH 10 DEGREES OF FREEDOM.

SIGNIFICANCE = .0050

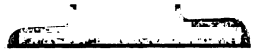

TABLE V

DIFFERENCES BETWEEN COLLEGE ENROLLMENT [AND] 4-2 MAKES AVAILABLE LABORATORY SPACE FOR INDIVIDUALS AND/OR TEAMS TO CARRY OUT PROJECTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SMALL (less than 1,000)							Row Total
Frequency	0	0	2	5	15	11	33
Row Percent	0	0	6.1	15.2	45.5	33.3	17.7
Column Percent	0	0	22.2	50.0	25.0	10.7	
Percent of Total	0	0	1.1	2.7	8.1	5.9	
MEDIUM-SIZE (1,000 - 4,999)							
Frequency	1	1	4	4	34	51	95
Row Percent	1.1	1.1	4.2	4.2	35.8	53.7	51.1
Column Percent	100.0	33.3	44.4	40.0	56.7	49.5	
Percent of Total	.5	.5	2.2	2.2	18.3	27.4	
LARGE (5,000 or more)							
Frequency	0	2	3	1	11	41	58
Row Percent	0	3.4	5.2	1.7	19.0	70.7	31.2
Column Percent	0	66.7	33.3	10.0	18.3	39.8	
Percent of Total	0	1.1	1.6	.5	5.9	22.0	

(Continued)

TABLE V, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
							Row Total
Column Total	1	3	9	10	60	103	186
	.5	1.6	4.8	5.4	32.3	55.4	100.0

RAW CHI SQUARE = 21.34973 WITH 10 DEGREES OF FREEDOM.

SIGNIFICANCE = .0188

TABLE VI

DIFFERENCES BETWEEN COLLEGE ENROLLMENT [AND] 5-5 DESIGNS GROUP INSTRUCTION SO THAT IT ULTIMATELY LEADS TO SMALL GROUP AND/OR INDEPENDENT STUDY ACTIVITIES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SMALL (less than 1,000)							Row Total
Frequency	1	5	5	1	17	4	33
Row Percent	3.0	15.2	15.2	3.0	51.5	12.1	17.7
Column Percent	50.0	29.4	27.8	5.0	24.6	6.7	
Percent of Total	.5	2.7	2.7	.5	9.1	2.2	
MEDIUM-SIZE (1,000 - 4,999)							
Frequency	1	4	7	13	35	35	95
Row Percent	1.1	4.2	7.4	13.7	36.8	36.8	51.1
Column Percent	50.0	23.5	38.9	65.0	50.7	58.3	
Percent of Total	.5	2.2	3.8	7.0	18.8	18.8	
LARGE (5,000 or more)							
Frequency	0	8	6	6	17	21	58
Row Percent	0	13.8	10.3	10.3	29.3	36.2	31.2
Column Percent	0	47.1	33.3	30.0	24.6	35.0	
Percent of Total	0	4.3	3.2	3.2	9.1	11.3	

(Continued)

TABLE VI, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
							Row Total
Column Total	2 1.1	17 9.1	18 9.7	20 10.8	69 37.1	60 32.3	186 100.0

RAW CHI SQUARE = 19.01828 WITH 10 DEGREES OF FREEDOM.

SIGNIFICANCE = .0400

TABLE VII

DIFFERENCES BETWEEN COLLEGE ENROLLMENT [AND] 7-4 HELPS STUDENT ARRANGE FOR USE OF INSTRUCTIONAL MATERIALS, EQUIPMENT, OR FACILITIES NEEDED FOR HIS/HER STUDY PROGRAM

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SMALL (less than 1,000)							Row Total
Frequency	1	1	0	0	23	8	33
Row Percent	3.0	3.0	0	0	69.7	24.2	17.7
Column Percent	33.3	20.0	0	0	32.4	8.3	
Percent of Total	.5	.5	0	0	12.4	4.3	
MEDIUM-SIZE (1,000 - 4,999)							
Frequency	1	2	2	4	32	54	95
Row Percent	1.1	2.1	2.1	4.2	33.7	56.8	51.1
Column Percent	33.3	40.0	50.0	57.1	45.1	56.3	
Percent of Total	.5	1.1	1.1	2.2	17.2	29.0	
LARGE (5,000 or more)							
Frequency	1	2	2	3	16	34	58
Row Percent	1.7	3.4	3.4	5.2	27.6	58.6	31.2
Column Percent	33.3	40.0	50.0	42.9	22.5	35.4	
Percent of Total	.5	1.1	1.1	1.6	8.6	18.3	

(Continued)

TABLE VII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
							Row Total
Column Total	3 1.6	5 2.7	4 2.2	7 3.8	71 38.2	96 51.6	186 100.0

RAW CHI SQUARE = 20.26321 WITH 10 DEGREES OF FREEDOM.

SIGNIFICANCE = .0269

TABLE VIII

DIFFERENCES BETWEEN COLLEGE ENROLLMENT [AND] 8-3 USES ASSESSMENT RESULTS TO EMPHASIZE THE STUDENT'S PROGRESS, STRENGTHS, AND ACCOMPLISHMENTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SMALL (less than 1,000)							Row Total
Frequency	1	0	0	0	16	16	33
Row Percent	3.0	0	0	0	48.5	48.5	17.7
Column Percent	50.0	0	0	0	30.8	12.9	
Percent of Total	.5	0	0	0	8.6	8.6	
MEDIUM-SIZE (1,000 - 4,999)							
Frequency	1	1	2	2	27	62	95
Row Percent	1.1	1.1	2.1	2.1	28.4	65.3	51.1
Column Percent	50.0	100.0	100.0	40.0	51.9	50.0	
Percent of Total	.5	.5	1.1	1.1	14.5	33.3	
LARGE (5,000 or more)							
Frequency	0	0	0	3	9	46	58
Row Percent	0	0	0	5.2	15.5	79.3	31.2
Column Percent	0	0	0	60.0	17.3	37.1	
Percent of Total	0	0	0	1.6	4.8	24.7	

(Continued)

TABLE VIII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
							Row Total
Column Total	2	1	2	5	52	124	186
	1.1	.5	1.1	2.7	28.0	66.7	100.0

RAW CHI SQUARE = 18.25657 WITH 10 DEGREES OF FREEDOM.

SIGNIFICANCE = .0508

TABLE IX

DIFFERENCES BETWEEN INDIVIDUALIZED TYPEWRITING INSTRUCTION EXPERIENCE [AND] 1-3 COLLECTS AUTOBIOGRAPHIES, ANECDOTAL RECORDS, AND OTHER INFORMATION TO HELP ASSESS STUDENTS' DIFFERENCES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
EXPERIENCE							Row Total
Frequency	1	24	32	34	28	5	124
Row Percent	.8	19.4	25.8	27.4	22.6	4.0	66.7
Column Percent	100.0	63.2	71.1	65.4	80.0	33.3	
Percent of Total	.5	12.9	17.2	18.3	15.1	2.7	
NO EXPERIENCE							
Frequency	0	14	13	18	7	10	62
Row Percent	0	22.6	21.0	29.0	11.3	16.1	33.3
Column Percent	0	36.8	28.9	34.6	20.0	66.7	
Percent of Total	0	7.5	7.0	9.7	3.8	5.4	
Column Total	1	38	45	52	35	15	186
	.5	20.4	24.2	28.0	18.8	8.1	100.0

RAW CHI SQUARE = 11.44899 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0432

TABLE X

DIFFERENCES BETWEEN INDIVIDUALIZED TYPEWRITING INSTRUCTION EXPERIENCE [AND] 6-3 PARTICIPATES ACTIVELY IN CERTAIN SMALL GROUP ACTIVITIES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
EXPERIENCE							Row Total
Frequency	3	12	10	12	48	39	124
Row Percent	2.4	9.7	8.1	9.7	38.7	31.5	66.7
Column Percent	75.0	92.3	55.6	48.0	64.0	76.5	
Percent of Total	1.6	6.5	5.4	6.5	25.8	21.0	
NO EXPERIENCE							
Frequency	1	1	8	13	27	12	62
Row Percent	1.6	1.6	12.9	21.0	43.5	19.4	33.3
Column Percent	25.0	7.7	44.4	52.0	36.0	23.5	
Percent of Total	.5	.5	4.3	7.0	14.5	6.5	
Column Total	4	13	18	25	75	51	186
	2.2	7.0	9.7	13.4	40.3	27.4	100.0

RAW CHI SQUARE = 11.33704 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0451

APPENDIX E

TABLE XI

DIFFERENCES BETWEEN SEX [AND] 1-8 DISCUSSES CAREER GOALS WITH INDIVIDUAL STUDENTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	1	5	7	13	17	43
Row Percent	0	2.3	11.6	16.3	30.2	39.5	23.1
Column Percent	0	100.0	31.3	50.0	18.1	20.7	
Percent of Total	0	.5	2.7	3.8	7.0	9.1	
FEMALE							
Frequency	1	0	11	7	59	65	143
Row Percent	.7	0	7.7	4.9	41.3	45.5	76.9
Column Percent	100.0	0	68.8	50.0	81.9	79.3	
Percent of Total	.5	0	5.9	3.8	31.7	34.9	
Column Total	1	1	16	14	72	82	186
	.5	.5	8.6	7.5	38.7	44.1	100.0

RAW CHI SQUARE = 11.21460 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0473

TABLE XII

DIFFERENCES BETWEEN SEX [AND] 2-1 DEVELOPS COURSE MATERIALS COOPERATIVELY WITH STUDENTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	8	13	7	10	5	43
Row Percent	0	18.6	30.2	16.3	23.3	11.6	23.1
Column Percent	0	32.0	46.4	18.9	15.9	15.6	
Percent of Total	0	4.3	7.0	3.8	5.4	2.7	
FEMALE							
Frequency	1	17	15	30	53	27	143
Row Percent	.7	11.9	10.5	21.0	37.1	18.9	76.9
Column Percent	100.0	68.0	53.6	81.1	84.1	84.4	
Percent of Total	.5	9.1	8.1	16.1	28.5	14.5	
Column Total	1	25	28	37	63	32	186
	.5	13.4	15.1	19.9	33.9	17.2	100.0

RAW CHI SQUARE = 13.20899 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0215

TABLE XIII

DIFFERENCES BETWEEN SEX [AND] 2-4 DEVELOPS COOPERATIVELY WITH STUDENTS THE PERFORMANCE GOALS AND OUTCOMES EXPECTED FOR THEM FROM THE COURSE OR UNITS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	4	11	5	13	10	43
Row Percent	0	9.3	25.6	11.6	30.2	23.3	23.1
Column Percent	0	23.5	50.0	25.0	18.6	18.2	
Percent of Total	0	2.2	5.9	2.7	7.0	5.4	
FEMALE							
Frequency	2	13	11	15	57	45	143
Row Percent	1.4	9.1	7.7	10.5	39.9	31.5	76.9
Column Percent	100.0	76.5	50.0	75.0	81.4	81.8	
Percent of Total	1.1	7.0	5.9	8.1	30.6	24.2	
Column Total	2	17	22	20	70	55	186
	1.1	9.1	11.8	10.8	37.6	29.6	100.0

RAW CHI SQUARE = 11.15570 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0484

TABLE XIV

DIFFERENCES BETWEEN SEX [AND] 3-1 MAINTAINS AN UP-TO-DATE SUPPLY OF TEXTS, BULLETINS, AND OTHER REFERENCE MATERIALS FOR STUDENT USE

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	1	1	2	20	19	43
Row Percent	0	2.3	2.3	4.7	46.5	44.2	23.1
Column Percent	0	100.0	16.7	16.7	37.0	17.0	
Percent of Total	0	.5	.5	1.1	10.8	10.2	
FEMALE							
Frequency	1	0	5	10	34	93	143
Row Percent	.7	0	3.5	7.0	23.8	65.0	76.9
Column Percent	100.0	0	83.3	83.3	63.0	83.0	
Percent of Total	.5	0	2.7	5.4	18.3	50.0	
Column Total	1	1	6	12	54	112	186
	.5	.5	3.2	6.5	29.0	60.2	

RAW CHI SQUARE = 12.32021 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0307

TABLE XV

DIFFERENCES BETWEEN SEX [AND] 3-2 PREPARES INSTRUCTIONAL MATERIALS NEEDED BY INDIVIDUAL STUDENTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	1	7	3	10	22	43
Row Percent	0	2.3	16.3	7.0	23.3	51.2	23.1
Column Percent	0	25.0	63.3	27.3	19.2	20.8	
Percent of Total	0	.5	3.8	1.6	5.4	11.8	
FEMALE							
Frequency	2	3	4	8	42	84	143
Row Percent	1.4	2.1	2.8	5.6	29.4	58.7	100.0
Column Percent	100.0	75.0	36.4	72.7	80.8	79.2	
Percent of Total	1.1	1.6	2.2	4.3	22.6	45.2	
Column Total	2	4	11	11	52	106	186
	1.1	2.2	5.9	5.9	28.0	57.0	100.0

RAW CHI SQUARE = 11.65192 WITH 5 DEGREES OF FREEDOM.

SIGNIFICANCE = .0399

TABLE XVI

DIFFERENCES BETWEEN SEX [AND] 9-3 SEEKS FROM COLLEGE ADMINISTRATION THE REQUIRED FACILITIES, EQUIPMENT, AND MATERIALS NEEDED FOR EFFECTIVE LEARNING TO TAKE PLACE

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
MALE							Row Total
Frequency	0	0	0	2	3	38	43
Row Percent	0	0	0	4.7	7.0	88.4	100.0
Column Percent	0	0	0	100.0	10.0	25.0	
Percent of Total	0	0	0	1.1	1.6	20.4	
FEMALE							
Frequency	1	0	1	0	27	114	143
Row Percent	.7	0	.7	0	18.9	79.7	76.9
Column Percent	100.0	0	100.0	0	90.0	75.0	
Percent of Total	.5	0	.5	0	14.5	61.3	
Column Total	1	0	1	2	30	152	186
	.5	0	.5	1.1	16.1	81.7	100.0

RAW CHI SQUARE = 10.46004 WITH 4 DEGREES OF FREEDOM.

SIGNIFICANCE = .0334

TABLE XVII

DIFFERENCES BETWEEN AGE [AND] 6-4 REACTS WITHIN GROUPS AS AN EQUAL

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
25 YEARS OR UNDER							Row Total
Frequency	0	2	0	0	3	0	5
Row Percent	0	40.0	0	0	60.0	0	2.7
Column Percent	0	8.0	0	0	6.3	0	
Percent of Total	0	1.1	0	0	1.6	0	
26 - 35 YEARS							
Frequency	1	5	7	14	19	17	63
Row Percent	1.6	7.9	11.1	22.2	30.2	27.0	33.9
Column Percent	33.3	20.0	31.8	29.8	39.6	41.5	
Percent of Total	.5	2.7	3.8	7.5	10.2	9.1	
36 - 45 YEARS							
Frequency	1	8	4	16	17	18	64
Row Percent	1.6	12.5	6.3	25.0	26.6	28.1	34.4
Column Percent	33.3	32.0	18.2	34.0	35.4	43.9	
Percent of Total	.5	4.3	2.2	8.6	9.1	9.7	

(Continued)

TABLE XVII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
46 - 55 YEARS							Row Total
Frequency	1	6	5	14	5	5	36
Row Percent	2.8	16.7	13.9	38.9	13.9	13.9	19.4
Column Percent	33.3	24.0	22.7	29.8	10.4	12.2	
Percent of Total	.5	3.2	2.7	7.5	2.7	2.7	
56 YEARS OR OLDER							
Frequency	0	4	6	3	4	1	18
Row Percent	0	22.2	33.3	16.7	22.2	5.6	9.7
Column Percent	0	16.0	27.3	6.4	8.3	2.4	
Percent of Total	0	2.2	3.2	1.6	2.2	.5	
Column Total	3	25	22	47	48	41	186
	1.6	13.4	11.8	25.3	25.8	22.0	100.0

RAW CHI SQUARE = 31.20159 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0526

TABLE XVIII

DIFFERENCES BETWEEN AGE [AND] 6-5 REMOVES HIMSELF/HERSELF PHYSICALLY FROM CERTAIN SMALL GROUP ACTIVITIES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
25 YEARS OR UNDER							Row Total
Frequency	0	1	0	1	3	0	5
Row Percent	0	20.0	0	20.0	60.0	0	2.7
Column Percent	0	5.0	0	1.6	5.7	0	
Percent of Total	0	.5	0	.5	1.6	0	
26 - 35 YEARS							
Frequency	2	3	5	18	22	13	63
Row Percent	3.2	4.8	7.9	28.6	34.9	20.6	33.9
Column Percent	50.0	15.0	35.7	29.5	41.5	38.2	
Percent of Total	1.1	1.6	2.7	9.7	11.8	7.0	
36 - 45 YEARS							
Frequency	1	6	2	22	21	12	64
Row Percent	1.6	9.4	3.1	34.4	32.8	18.8	34.4
Column Percent	25.0	30.0	14.3	36.1	39.6	35.3	
Percent of Total	.5	3.2	1.1	11.8	11.3	6.5	

(Continued)

TABLE XVIII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
46 - 55 YEARS							Row Total
Frequency	1	4	2	16	4	9	36
Row Percent	2.8	11.1	5.6	44.4	11.1	25.0	19.4
Column Percent	25.0	20.0	14.3	26.2	7.5	26.5	
Percent of Total	.5	2.2	1.1	8.6	2.2	4.8	
56 YEARS OR OLDER							
Frequency	0	6	5	4	3	0	18
Row Percent	0	33.3	27.8	22.2	16.7	0	9.7
Column Percent	0	30.0	35.7	6.6	5.7	0	
Percent of Total	0	3.2	2.7	2.2	1.6	0	
Column Total	4	20	14	61	53	34	186
	2.2	10.8	7.5	32.8	28.5	18.3	100.0

RAW CHI SQUARE = 39.96673 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0050

TABLE XIX

DIFFERENCES BETWEEN AGE [AND] 7-3 ASSISTS STUDENT IN ASSESSING PROGRESS AND IN PLANNING SUPPORTING AND/OR ADVANCED STUDY PROGRAMS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
25 YEARS OR UNDER							Row Total
Frequency	0	1	0	2	0	2	5
Row Percent	0	20.0	0	40.0	0	40.0	2.7
Column Percent	0	25.0	0	22.2	0	2.0	
Percent of Total	0	.5	0	1.1	0	1.1	
26 - 35 YEARS							
Frequency	1	1	4	4	25	28	63
Row Percent	1.6	1.6	6.3	6.3	39.7	44.4	33.9
Column Percent	33.3	25.0	50.0	44.4	39.7	28.3	
Percent of Total	.5	.5	2.2	2.2	13.4	15.1	
36 - 45 YEARS							
Frequency	1	1	3	0	21	38	64
Row Percent	1.6	1.6	4.7	0	32.8	59.4	34.4
Column Percent	33.3	25.0	37.5	0	33.3	38.4	
Percent of Total	.5	.5	1.6	0	11.3	20.4	

(Continued)

TABLE XIX, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
46 - 55 YEARS							Row Total
Frequency	1	1	1	3	9	21	36
Row Percent	2.8	2.8	2.8	8.3	25.0	58.3	19.4
Column Percent	33.3	25.0	12.5	33.3	14.3	21.2	
Percent of Total	.5	.5	.5	1.6	4.8	11.3	
56 YEARS OR OLDER							
Frequency	0	0	0	0	8	10	18
Row Percent	0	0	0	0	44.4	55.6	9.7
Column Percent	0	0	0	0	12.7	10.1	
Percent of Total	0	0	0	0	4.3	5.4	
Column Total	3	4	8	9	63	99	186
	1.6	2.2	4.3	4.8	33.9	53.2	100.0

RAW CHI SQUARE = 34.00020 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0261

TABLE XX

DIFFERENCES BETWEEN AGE [AND] 8-6 ASSISTS STUDENT IN USING EVALUATIVE DATA IN PLANNING FUTURE STUDY

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
25 YEARS OR UNDER							Row Total
Frequency	0	1	0	1	1	2	5
Row Percent	0	20.0	0	20.0	20.0	40.0	2.7
Column Percent	0	50.0	0	16.7	1.4	2.0	
Percent of Total	0	.5	0	.5	.5	1.1	
26 - 35 YEARS							
Frequency	1	0	1	2	27	32	63
Row Percent	1.6	0	1.6	3.2	42.9	50.8	33.9
Column Percent	50.0	0	20.0	33.3	37.5	32.3	
Percent of Total	.5	0	.5	1.1	14.5	17.2	
36 - 45 YEARS							
Frequency	1	1	1	1	25	35	64
Row Percent	1.6	1.6	1.6	1.6	39.1	54.7	34.4
Column Percent	50.0	50.0	20.0	16.7	34.7	35.4	
Percent of Total	.5	.5	.5	.5	13.4	18.8	

(Continued)

TABLE XX, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
46 - 55 YEARS							Row Total
Frequency	0	0	1	1	11	23	36
Row Percent	0	0	2.8	2.8	30.6	63.9	19.4
Column Percent	0	0	20.0	16.7	15.3	23.2	
Percent of Total	0	0	.5	.5	5.9	12.4	
56 YEARS OR OLDER							
Frequency	0	0	2	1	8	7	18
Row Percent	0	0	11.1	5.6	44.4	38.9	9.7
Column Percent	0	0	40.0	16.7	11.1	7.1	
Percent of Total	0	0	1.1	.5	4.3	3.8	
Column Total	2	2	5	6	72	99	186
	1.1	1.1	2.7	3.2	38.7	53.2	100.0

RAW CHI SQUARE = 32.91976 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0344

TABLE XXI

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 1-3 COLLECTS AUTOBIOGRAPHIES, ANECDOTAL RECORDS, AND OTHER INFORMATION TO HELP ASSESS STUDENT DIFFERENCES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	0	0	2	0	0	2
Row Percent	0	0	0	100.0	0	0	1.1
Column Percent	0	0	0	3.8	0	0	
Percent of Total	0	0	0	1.1	0	0	
BACCALAUREATE							
Frequency	0	5	4	9	7	1	26
Row Percent	0	19.2	15.4	34.6	26.9	3.8	14.0
Column Percent	0	13.2	8.9	17.3	20.0	6.7	
Percent of Total	0	2.7	2.2	4.8	3.8	.5	
MASTERS							
Frequency	1	30	39	38	22	8	138
Row Percent	.7	21.7	28.3	27.5	15.9	5.8	74.2
Column Percent	100.0	78.9	86.7	73.1	62.9	53.3	
Percent of Total	.5	16.1	21.0	20.4	11.8	4.3	

(Continued)

TABLE XXI, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	2	2	2	3	2	11
Row Percent	0	18.2	18.2	18.2	27.3	18.2	5.9
Column Percent	0	5.3	4.4	3.8	8.6	13.3	
Percent of Total	0	1.1	1.1	1.1	1.6	1.1	
DOCTORATE							
Frequency	0	1	0	1	3	4	9
Row Percent	0	11.1	0	11.1	33.3	44.4	4.8
Column Percent	0	2.6	0	1.9	8.6	26.7	
Percent of Total	0	.5	0	.5	1.6	2.2	
Column Total	1	38	45	52	35	15	186
	.5	20.4	24.2	28.0	18.8	8.1	100.0

RAW CHI SQUARE = 32.42439 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0390

TABLE XXII

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 5-2 USES LARGE GROUPS AS AUDIENCES FOR REPORTS AND PRESENTATIONS OF ACTIVITIES DEVELOPED IN SMALL GROUPS AND/OR THROUGH INDEPENDENT STUDY

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	1	0	0	1	0	2
Row Percent	0	50.0	0	0	50.0	0	1.1
Column Percent	0	2.0	0	0	2.4	0	
Percent of Total	0	.5	0	0	.5	0	
BACCALAUREATE							
Frequency	0	6	6	11	3	0	26
Row Percent	0	23.1	23.1	42.3	11.5	0	14.0
Column Percent	0	11.8	16.2	25.6	7.3	0	
Percent of Total	0	3.2	3.2	5.9	1.6	0	
MASTERS							
Frequency	2	40	27	27	35	7	138
Row Percent	1.4	29.0	19.6	19.6	25.4	5.1	74.2
Column Percent	100.0	78.4	73.0	62.8	85.4	58.3	
Percent of Total	1.1	21.5	14.5	14.5	18.8	3.8	

(Continued)

TABLE XXII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	1	4	2	2	2	11
Row Percent	0	9.1	36.4	18.2	18.2	18.2	5.9
Column Percent	0	2.0	10.8	4.7	4.9	16.7	
Percent of Total	0	.5	2.2	1.1	1.1	1.1	
DOCTORATE							
Frequency	0	3	0	3	0	3	9
Row Percent	0	33.3	0	33.3	0	33.3	4.8
Column Percent	0	5.9	0	7.0	0	25.0	
Percent of Total	0	1.6	0	1.6	0	1.6	
Column Total	2	51	37	43	41	12	186
	1.1	27.4	19.9	23.1	22.0	6.5	100.0

RAW CHI SQUARE = 31.93884 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0440

TABLE XXIII

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 8-2 MEASURES PROGRESS IN TERMS OF PREVIOUSLY STATED PERFORMANCE OBJECTIVES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	0	0	0	0	2	2
Row Percent	0	0	0	0	0	100.0	1.1
Column Percent	0	0	0	0	0	1.6	
Percent of Total	0	0	0	0	0	1.1	
BACCALAUREATE							
Frequency	1	0	0	0	7	18	26
Row Percent	3.8	0	0	0	26.9	69.2	14.0
Column Percent	33.3	0	0	0	14.0	14.0	
Percent of Total	.5	0	0	0	3.8	9.7	
MASTERS							
Frequency	1	0	0	3	36	98	138
Row Percent	.7	0	0	2.2	26.1	71.0	74.2
Column Percent	33.3	0	0	100.0	72.0	76.0	
Percent of Total	.5	0	0	1.6	19.4	52.7	

(Continued)

TABLE XXIII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	1	0	0	6	4	11
Row Percent	0	9.1	0	0	54.5	36.4	5.9
Column Total	0	100.0	0	0	12.0	3.1	
Percent of Total	0	.5	0	0	3.2	2.2	
DOCTORATE							
Frequency	1	0	0	0	1	7	9
Row Percent	11.1	0	0	0	11.1	77.8	4.8
Column Percent	33.3	0	0	0	2.0	5.4	
Percent of Total	.5	0	0	0	.5	3.8	
Column Total	3	1	0	3	50	129	186
	1.6	.5	0	1.6	26.9	69.4	100.0

RAW CHI SQUARE = 30.35368 WITH 16 DEGREES OF FREEDOM.

SIGNIFICANCE = .0163

TABLE XXIV

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 8-3 USES ASSESSMENT RESULTS TO EMPHASIZE THE STUDENT'S PROGRESS, STRENGTHS, AND ACCOMPLISHMENTS

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	0	0	0	0	2	2
Row Percent	0	0	0	0	0	100.0	1.1
Column Percent	0	0	0	0	0	1.6	
Percent of Total	0	0	0	0	0	1.1	
BACCALAUREATE							
Frequency	1	0	1	2	9	13	26
Row Percent	3.8	0	3.8	7.7	34.6	50.0	14.0
Column Percent	50.0	0	50.0	40.0	17.3	10.5	
Percent of Total	.5	0	.5	1.1	4.8	7.0	
MASTERS							
Frequency	1	0	1	3	37	96	138
Row Percent	.7	0	.7	2.2	26.8	69.6	74.2
Column Percent	50.0	0	50.0	60.0	71.2	77.4	
Percent of Total	.5	0	.5	1.6	19.9	51.6	

(Continued)

TABLE XXIV, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	0	0	0	6	5	11
Row Percent	0	0	0	0	54.5	45.5	5.9
Column Percent	0	0	0	0	11.5	4.0	
Percent of Total	0	0	0	0	3.2	2.7	
DOCTORATE							
Frequency	0	1	0	0	0	8	9
Row Percent	0	11.1	0	0	0	88.9	4.8
Column Percent	0	100.0	0	0	0	6.5	
Percent of Total	0	.5	0	0	0	4.3	
Column Total	2	1	2	5	52	124	186
	1.1	.5	1.1	2.7	28.0	66.7	100.0

RAW CHI SQUARE = 36.65107 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0129

TABLE XXV

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 8-6 ASSISTS STUDENT IN USING EVALUATIVE DATA IN PLANNING FUTURE STUDY

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	1	0	0	1	0	2
Row Percent	0	50.0	0	0	50.0	0	1.1
Column Percent	0	50.0	0	0	1.4	0	
Percent of Total	0	.5	0	0	.5	0	
BACCALAUREATE							
Frequency	1	0	0	1	13	11	26
Row Percent	3.8	0	0	3.8	50.0	42.3	14.0
Column Percent	50.0	0	0	16.7	18.1	11.1	
Percent of Total	.5	0	0	.5	7.0	5.9	
MASTERS							
Frequency	1	1	5	5	50	76	138
Row Percent	.7	.7	3.6	3.6	36.2	55.1	74.2
Column Percent	50.0	50.0	100.0	83.3	69.4	76.8	
Percent of Total	.5	.5	2.7	2.7	26.9	40.9	

(Continued)

TABLE XXV, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	0	0	0	6	5	11
Row Percent	0	0	0	0	54.5	45.5	5.9
Column Percent	0	0	0	0	8.3	5.1	
Percent of Total	0	0	0	0	3.2	2.7	
DOCTORATE							
Frequency	0	0	0	0	2	7	9
Row Percent	0	0	0	0	22.2	77.8	4.8
Column Percent	0	0	0	0	2.8	7.1	
Percent of Total	0	0	0	0	1.1	3.8	
Column Total	2	2	5	6	72	99	186
	1.1	1.1	2.7	3.2	38.7	53.2	100.0

RAW CHI SQUARE = 55.33699 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0000

TABLE XXVI

DIFFERENCES BETWEEN LEVEL OF EDUCATION [AND] 9-1 RELATES STUDENTS' NEEDS FOR CHANGES IN DEPARTMENT POLICIES AND PRACTICES THAT AFFECT LEARNING TO THE ADMINISTRATION

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
LESS THAN BACCALAUREATE							Row Total
Frequency	0	1	0	0	0	1	2
Row Percent	0	50.0	0	0	0	50.0	1.1
Column Percent	0	50.0	0	0	0	1.2	
Percent of Total	0	.5	0	0	0	.5	
BACCALAUREATE							
Frequency	0	0	0	3	10	13	26
Row Percent	0	0	0	11.5	38.5	50.0	14.0
Column Percent	0	0	0	20.0	12.8	16.0	
Percent of Total	0	0	0	1.6	5.4	7.0	
MASTERS							
Frequency	2	1	7	10	62	56	138
Row Percent	1.4	.7	5.1	7.2	44.9	40.6	74.2
Column Percent	100.0	50.0	87.5	66.7	79.5	69.1	
Percent of Total	1.1	.5	3.8	5.4	33.3	30.1	

(Continued)

TABLE XXVI, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
SPECIALIST							Row Total
Frequency	0	0	1	1	5	4	11
Row Percent	0	0	9.1	9.1	45.5	36.4	5.9
Column Percent	0	0	12.5	6.7	6.4	4.9	
Percent of Total	0	0	.5	.5	2.7	2.2	
DOCTORATE							
Frequency	0	0	0	1	1	7	9
Row Percent	0	0	0	11.1	11.1	77.8	4.8
Column Percent	0	0	0	6.7	1.3	8.6	
Percent of Total	0	0	0	.5	.5	3.8	
Column Total	2	2	8	15	78	81	186
	1.1	1.1	4.3	8.1	41.9	43.5	100.0

RAW CHI SQUARE = 55.39997 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0000

TABLE XXVII

DIFFERENCES BETWEEN TWO-YEAR COLLEGE TEACHING EXPERIENCE [AND] 2-8 DESIGNS CURRICULUM TO ALLOW FOR SELF-INSTRUCTION

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	0	0	4	2	21	17	44
Row Percent	0	0	9.1	4.5	47.7	38.6	23.7
Column Percent	0	0	26.7	16.7	31.8	18.7	
Percent of Total	0	0	2.2	1.1	11.3	9.1	
4 - 7 YEARS							
Frequency	1	0	3	2	19	33	58
Row Percent	1.7	0	5.2	3.4	32.8	56.9	31.2
Column Percent	100.0	0	20.0	16.7	28.8	36.3	
Percent of Total	.5	0	1.6	1.1	10.2	17.7	
8 - 11 YEARS							
Frequency	0	0	2	6	18	25	51
Row Percent	0	0	3.9	11.8	35.3	49.0	27.4
Column Percent	0	0	13.3	50.0	27.3	27.5	
Percent of Total	0	0	1.1	3.2	9.7	13.4	

(Continued)

TABLE XXVII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	0	6	2	5	10	23
Row Percent	0	0	26.1	8.7	21.7	43.5	12.4
Column Percent	0	0	40.0	16.7	7.6	11.0	
Percent of Total	0	0	3.2	1.1	2.7	5.4	
OVER 15 YEARS							
Frequency	0	1	0	0	3	6	10
Row Percent	0	10.0	0	0	30.0	60.0	5.4
Column Percent	0	100.0	0	0	4.5	6.6	
Percent of Total	0	.5	0	0	1.6	3.2	
Column Total	1	1	15	12	66	91	186
	.5	.5	8.1	6.5	35.5	48.9	100.0

RAW CHI SQUARE = 41.12182 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0036

TABLE XXVIII

DIFFERENCES BETWEEN TWO-YEAR COLLEGE TEACHING EXPERIENCE [AND] 3-3 ASSISTS STUDENTS IN PREPARATION OF INSTRUCTIONAL MATERIALS FOR THEIR OWN USE

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	0	4	9	9	16	6	44
Row Percent	0	9.1	20.5	20.5	36.4	13.6	23.7
Column Percent	0	15.4	34.6	20.5	30.8	16.7	
Percent of Total	0	2.2	4.8	4.8	8.6	3.2	
4 - 7 YEARS							
Frequency	2	4	2	20	14	16	58
Row Percent	3.4	6.9	3.4	34.5	24.1	27.6	31.2
Column Percent	100.0	15.4	7.7	45.5	26.9	44.4	
Percent of Total	1.1	2.2	1.1	10.8	7.5	8.6	
8 - 11 YEARS							
Frequency	0	9	10	9	13	10	51
Row Percent	0	17.6	19.6	17.6	25.5	19.6	27.4
Column Percent	0	34.6	38.5	20.5	25.0	27.8	
Percent of Total	0	4.8	5.4	4.8	7.0	5.4	

(Continued)

TABLE XXVIII, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	6	5	5	5	2	23
Row Percent	0	26.1	21.7	21.7	21.7	8.7	12.4
Column Percent	0	23.1	19.2	11.4	9.6	5.6	
Percent of Total	0	3.2	2.7	2.7	2.7	1.1	
OVER 15 YEARS							
Frequency	0	3	0	1	4	2	10
Row Percent	0	30.0	0	10.0	40.0	20.0	5.4
Column Percent	0	11.5	0	2.3	7.7	5.6	
Percent of Total	0	1.6	0	.5	2.2	1.1	
Column Total	2	26	26	44	52	36	186
	1.1	14.0	14.0	23.7	28.0	19.3	100.0

RAW CHI SQUARE = 32.61009 WITH 20 DEGREES OF FREEDOM.

SIGNIFICANCE = .0372

TABLE XXIX

DIFFERENCES BETWEEN TWO-YEAR COLLEGE TEACHING EXPERIENCE [AND] 8-2 MEASURES PROGRESS IN TERMS OF PREVIOUSLY STATED PERFORMANCE OBJECTIVES

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
3 YEARS OR LESS							Row Total
Frequency	1	0	0	0	6	37	44
Row Percent	2.3	0	0	0	13.6	84.1	23.7
Column Percent	33.3	0	0	0	12.0	28.7	
Percent of Total	.5	0	0	0	3.2	19.9	
4 - 7 YEARS							
Frequency	2	0	0	1	16	39	58
Row Percent	3.4	0	0	1.7	27.6	67.2	31.2
Column Percent	66.7	0	0	33.3	32.0	30.2	
Percent of Total	1.1	0	0	.5	8.6	21.0	
8 - 11 YEARS							
Frequency	0	0	0	0	14	37	51
Row Percent	0	0	0	0	27.5	72.5	27.4
Column Percent	0	0	0	0	28.0	28.7	
Percent of Total	0	0	0	0	7.5	19.9	

(Continued)

TABLE XXIX, Continued

	No Response	Not Important	Somewhat Important	Undecided	Important	Very Important	
12 - 15 YEARS							Row Total
Frequency	0	1	0	1	10	11	23
Row Percent	0	4.3	0	4.3	43.5	47.8	12.4
Column Percent	0	100.0	0	33.3	20.0	8.5	
Percent of Total	0	.5	0	.5	5.4	5.9	
OVER 15 YEARS							
Frequency	0	0	0	1	4	5	10
Row Percent	0	0	0	10.0	40.0	50.0	5.4
Column Percent	0	0	0	33.3	8.0	3.9	
Percent of Total	0	0	0	.5	2.2	2.7	
Column Total	3	1	0	3	50	129	186
	1.6	.5	0	1.6	26.9	69.4	100.0

RAW CHI SQUARE = 26.18908 WITH 16 DEGREES OF FREEDOM.

SIGNIFICANCE = .0514