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A COMPARISON OF WORD PROCESSING INSTRUCTIONAL METHODS IN KANSAS COMMUNITY COLLEGES AND SECONDARY SCHOOLS

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A COMPARISON OF WORD PROCESSING INSTRUCTIONAL METHODS IN KANSAS COMMUNITY COLLEGES AND SECONDARY SCHOOLS

A Thesis Submitted to the Graduate School in Partial Fulfillment of the Requirements for the Degree Master of Science

By

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Abstract

The purpose of this study was to explore the relationship of instructional methods utilized in commuity colleges in the State of Kansas as compared to a random sampling of secondary schools in Southeastern Kansas. Also included in the study was an analysis of word processing courses currently offered with respect to software packages being taught. In addition, change in enrollment and if general education courses included a course in word processing were also studied.

Conclusions show that various methods of instruction are utilized in addition to various software packages being taught. In comparison between the two levels of education to which this study pertains, there was no significant difference between methods of instruction. There were strong recommendations which encouraged instructors to be familiar with their students' backgrounds with respect to computers in general and to word processing in particular. As a result, these recommendations assist the instructor in determining appropriate methods of instruction. implemented.

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Chapter One

INTRODUCTION

Introduction to the Purpose

This research paper will explore the various aspects of instructional methods used in word processing in the secondary level and community college classroom. Although much of the material gained through various professional journals relates to the secondary level, this same material can be applied on the community college level. The reason for applying material to the community college classroom is based on the fact that an applications course such as word processing should force a student to offer a performance on assignments which will be indicative of that student's performance on the job. In other words, if an assignment is submitted to the instructor which does not meet the prescribed standards (for example: correct spelling, correct margins, justification). The instructor should call these errors to the student's attention at once, because once on the job a completed project not meeting standards set forth by the employer could result in the loss of that employee's job. In a

community college course, many students are enrolled who are currently working at a full-time job or shortly will be. (Howard 1988) As a result, attention to mistakes, regardless of how "minor" they may be, must be addressed by the instructor. Although employers tend to provide instruction as to their methods of accomplishing various tasks, including computer training in specific software packages--word processing, spreadsheets, and data base--much information can be learned in the classroom. (Edgmond, 1988) Various instructional methods are utilized so that a maximum learning environment can exist. (Karen Bryan Interview) The same principle can, and should, be applied to a course of this type on the university level. Although this research paper will emphasize word processing courses, many of the same principles discussed can also be applied to any course of an applications nature.

Statement of the Problem

The purpose of this study is to determine the various word processing instructional methods utilized in secondary and community college classrooms. Also included will be an analysis of the number of years which word processing courses have been offered, length of the course and change in enrollment pattern. Also studied were types of packages which

are currently being taught, whether word processing is required under the general education requirements at a given institution, and if expansion of the choice of software in current word processing courses will occur in the future.

Significance of The Study

Over the years, word processing has been introduced in the secondary level classroom in addition to the community college classroom. As a result of these relative new courses being offered in the curriculum, questions may exist on the types of instructional methods which will benefit the students. The various instructional methods in classrooms on the secondary level and the community college level will be compared with respect to similarities and differences. Instructors on each educational level covered by this study will be able to ascertain how their individual methods of instruction relate to methods of instruction used by other instructors on that level. In addition, they will be able to compare their methods to instructors on the alternate level. As a result of this study, instructors may wish to alter their instructional methods to those which are found to be the most common and beneficial.

Hypothesis

There will be no significant difference in methods of word processing instruction in secondary classrooms in Southeastern Kansas as compared with those methods of word processing instruction in community college classrooms in the State of Kansas.

Limitations of The Study

1. This study will be limited to the number of secondary schools and community colleges which were contacted for this study.

2. Although a random sample was intended by the author, there can be no assurance that a random sample was in fact obtained for the purpose of this study.

3. This study is limited by the experience and preference of teaching methods used by the instructors responding to the questionnaire used in this study.

4. This study is limited by a time constraint of one semester and a thorough study of this type would require a much longer period of time than permitted by one semester.

Basic Assumptions

1. Word processing instructors in area secondary schools and Kansas community colleges will

assist in the study by completing the questionnaire which will be used in this study.

2. Word processing instructors in this study will be competent in their area.

3. The information gained from the questionnaire will provide the necessary information in order to support or reject the stated hypothesis.

4. There is a need for a study of this type in order to assist instructors in the areas of instructional methods, test construction and grading policies.

Definition of Terms

Computer Literacy--a user's level of understanding of and familiarity with the principles of hardware and software.

Hardware--the physical equipment which makes up the computer system, i.e., display, keyboard, and printer.

Instructional Methods--a term which applies to the process of presenting course material in a classroom situation. Some of the more common methods are lecture, small and large group discussions, and use of classroom media.

Software--a general term which refers to programs stored on a magnetic medium.

Spreadsheets--a software package which will enable the user to prepare financial statements and other financially related documents. Spreadsheets involve the use of formulas to calculate totals, averages, standard deviations, and other necessary data. As a result, spreadsheets are commonly found as gradebooks for instructors.

Word Processing--the use of a computer applications program which enables the creation of written documents such as memos, letters, reports, articles, and books.

Chapter Two

REVIEW OF LITERATURE

Word processing is utilized by many companies in business. Although this research discusses various instructional methods used in word processing courses, it is believed a short history and description of word processing would be beneficial to the reader.

Word processing as a whole can be described as a method of creating documents, i.e., letters and memos. The chief characteristic of a word processor is that the typist can view the material entered into the machine before the document is printed and thus corrections can be made and/or editing can be accomplished in a manner with greater accuracy and ease than on a typewriter. However, it should be pointed out that a major difference exists between word processors and typewriters. In fact, Flores (1983) states the difference between the two is similar to "pen and ink" versus "ancient hierglyphics."

There are three main advantages associated with using a word processor over a typewriter. First, the operator is able to rework entire sections of a

document without the problems associated with reworking the entire document. Second, the operator will become more comfortable with unique vocabularies associated with the operator's employment since the operator will tend to "experiment" on the word processor because errors can be easily corrected. Third, ease of use. (Flores 1983)

Heim (1987) states that the main "converts" to a word processor are those who prepare and "use letters, memos, and books." In short, word processors are the "calculators of the humanist." (Heim 1987) (In other words, people who operate word processors become accustomed to the machine's capabilities faster than people who do not.) Once a person has used a word processor and feels comfortable with it, that person will tend to use a word processor over a typewriter if at all possible. However, in all probability with current technology, typewriters will never be replaced in total by word processors since there are some functions which are more readily performed on a typewriter than a word processor. (Patricia Soucy Interview) Heim (1987) defines word processing as "computer-assisted document preparation, which includes writing, editing, storing, proofing, printing and electronically transmitting documents written in one of the natural languages."

In addition to knowing a little about the history of word processing, a student should also be exposed to some knowledge concerning management of word processing. Cecil (1988) states that there are four areas to be addressed in this area which are "automation, training, implementing efficient workflow procedures, and general management of operations." He also states that word processing is a "system" consisting of input, processing, and output.

Word processing had its history in the early 196Ø's "with the appearance of a stand-alone automated typewriter which was capable of recording and replaying keystrokes." (Hentz 1988) In 1964, International Business Machines (IBM) introduced the Magnetic Tape Selectric Typewriter which was a machine using a "magnetic tape to record the typist's keystrokes." (Bell 1988)

In 1971, although IBM had modified it's MTST, the first cathode ray tube (CRT) machine was introduced by Lexitron Corporation which was called "Videotype." (Bell 1988) The chief advantage of the CRT was to allow the typist to see characters entered in a given document on a screen prior to that document being printed. By allowing the typist to view the document on a screen prior to it being printed, editing could be accomplished with ease.

In 1973, Vydek "introduced the first wordprocessor that used magnetic disks and a disk drive for storing documents." (Hentz 1988) This was a breakthrough in the area of being able to store documents since a "form" letter, memo, and other standard documents could be prepared once, stored on the disk. Subsequently, the stored document could be retrieved when needed, corrections made, and the document printed. Obviously, this is indeed a time-saver and the practice of saving and retrieving "form" documents (known as a boilerplate) is common practice today.

In 1978, Micropro International Corporation introduced a software package known as "WordStar." (Ettlin 1982) This package, still common in businesses today, creates the need for this package to be taught in word processing courses. This was the first package to be designed for a word processor. Since 1978, a multitude of word processing software packages have been introduced and will continue to be introduced. Many software companies have entered the field of designing and selling word processing software packages. In addition to bringing out new software, existing software is often modified to update that software to stay abreast of new software. People using a given software package are the best

judge of how that particular package performs in a given situation and as a result offer advice (as well as complaints) to the company which developed that package. With this in mind, the company developing the package will modify the existing version. With the modifications, the package is known as "having been updated".

Howard (1988) states that on the campus of Northern Virginia Community College in Annandale, Virginia, the word processing staff was asked to teach word processing to secretaries employed on the campus. The attitude of the college administration was that the word processing department was best suited to teach its existing secretarial staff the concepts behind word processing. As a result, a specific course and new instructional methods had to be developed. The methods used were applicable to the student's background in the area of word processing, job requirements of a given secretary, and general attitude of the students. Howard also states that the "well-prepared word processing instructor will recognize the need to present theory and concepts as they relate to computer applications." The concept is also presented that instructors prepare a manual which will discuss the course objectives, preview the

software package which will be taught, and provide a short introductory exercise.

Some instructors feel that a combination of instructional methods are best suited for a word processing course. Aminoff (1988) states that at the New York City Technical College of the City University of New York, the "lecture/demonstration/participation" method works well. Although there are advantages and disadvantages of this method of instruction, as there is in any method of instruction, the main use of this method exists in a classroom where students are all fairly equal in their experience in word processing. As Aminoff states, many instructors will emphasize the lecture aspect and not place too much importance on demonstration and/or participation. She also states that "word processing is a hands-on course, and 'participation' is the key word." It is important that students be given an exercise which they can handle if for no other reason than for the student's to gain confidence in themselves. Aminoff also states that at the outset of an exercise, the instructor should take the class through step-by-step and ascertain that each student is at the same step before proceeding. In this manner, students will be more likely to learn as well as to prevent an accidental erasure of material on the computer disks.

Wong (1988) suggests a generic approach to instruction so that more time will be spent on operation of software and less time on operation of equipment. The reason behind this rationale is that a student should be able to adjust to a given word processing package with little trouble. If word processing theory is provided at the outset of a course and the student is also provided with handouts pertaining to the new package, that student should be able to comprehend the basics of the new package with little or no trouble. This is especially helpful in an employment setting. If an employee has developed the confidence to work with a new package with that confidence being nurtured on the student level, that employee will be more valued in the eyes of the employer.

Kuuskmae (1989) provides a concept to further enhance participation on the student's part by providing additional material to the students. This would be accomplished by the instructor preparing an assortment of assignments which are all fairly related in substance. Simulation of office work for the students to complete. This method will not only provide added practice on the part of the students, but also will provide exposure to what they might expect on the job. Obviously, the second part will

only hold true if the instructor prepares up-to-date material as is pointed out by Kuuskmae.

Augustin (1988) states that the selection of word processing software packages is an area of vital concern. Many companies will have a word processing package which will either be sold with, or be available for, their specific brand of computer. Budget constraints play a major role in the decision as to which package(s) to use but one area which the instructor should research is the use of specific software packages in area businesses. If at all possible, packages taught should be representative of packages which will be found on the job which students will hold. In addition, instructors need to be familiar will all aspects of the package which they are teaching. They should complete all exercises and assignments which the students will be doing in order to determine errors in instructions as well as to see if any instructions are somewhat vague. (Augustin 1988) It is also stated that "students are normally very enthusiastic about using the computers." (Augustin 1988) As a result, rules for classroom conduct should be given the first day of class. Augustin states that "it is advisable for teachers to collect the students' data disks daily" so it will be possible for teachers to randomly check to see if

students are doing their assignments as assigned as well as to check to see if students are doing their own work. Augustin also states that in any given word processing course, "flexibility is important because it is often necessary to make some adjustments to preset standards." This will be the case, more often than not, for instructors teaching a course of this type for the first time.

Gioffre (1989) states that as students learn, instructional methods should change to a nonlecture format. Several examples of methods used in this format are: diagnostic, individualized instruction, group instruction, case studies, problem-solving, discussion, and simulation. The advantages of some, or all, of the above methods are that "students progress at their own rate, learn how to work with others, and build an understanding for what they are doing." The main idea is that the instructor utilizes "a variety of nonlecture methods to teach the class, thereby enhancing the learning process."

Dr. Hollis Chalem (1987), Oakton Community College, conducted research on determining current trends in the office environment and adjusting curricula to meet changing needs in the business world. As the curriculum changes, often instructional methods will change to meet course objectives. He

also states that one major concern to educators should be to maintain open lines of communication between the academic world and the business world. This will have many advantages in terms of maintaining a current curriculum, and access to guest speakers. Guest speakers can provide an invaluable alternative to normal instructional methods by allowing someone from the business world to expound on topics discussed in class.

Dr. Robert W. Kusek (1989), Fulton-Montgomery Community College, states that regardless of the instructional method(s) used by a given instructor, that instructor's classroom should "accurately reflect the world of office technology." This would not be a one-time function, but a continuing function as the business world does not stand still. Other methods proposed by Kusek are student-oriented, i.e., oral and written reports to practice communication skills, on-site visits to area business firms, and developing and conducting research projects.

An article in the journal, Media and Methods, offers an insight on teaching students responsibility. One method discussed by the author is based on reducing a given assignment's grade in the event that that assignment is turned in late. ("Word Processing," 1988) This approach for teaching word

processing is included since many word processing students will be actively pursuing a position after completion of their word processing course and often there is a bridge to cross between the academic world and the business world.

Barta (1989) conducted a study at the University of North Dakota during the 1986 fall semester to "identify an effective method for providing keyboarding instruction to college students." The experimental study using pretest/posttest was designed to compare one group using self-directed word processing instruction to a second group using teacher-directed instruction. A difference was reported between the two groups at the end of the study in that the self-directed instruction group had an average score of "4.5 formatting errors compared to a mean of 1.8 formatting errors among the teacher-directed students." Results suggest the theory that at the stage of document preparation, students will benefit the most from teacher-directed instruction. In addition, in the teacher-directed instructional group, the number of students dropping the course was significantly less than the number dropping in the self-directed group. Self-directed instruction is not to be ignored as it is a valuable means of instruction if the students are capable of learning a given

software package on their own and as a result, should be incorporated whenever circumstances warrant.

Word processing is a type of course which must utilize a "hands-on" approach to instructional methods. As a courtesy to the reader who may not be familiar with the various instructional methods which may be utilized, the most common methods will be discussed.

The lecture method is a type of course content presentation whereby the instructor will present content to the students with the students taking notes and being encouraged to ask questions concerning any material which may not be clear.

The demonstration method will utilize "teaching by example." The instructor will present material to the class with the intent that the class observe the procedure. This method of presentation is common in a natural science-related course such as chemistry. Again, students are encouraged to ask questions over any material which may not be clear to them. In-class projects encompass "learning by doing" and as is expected, experience is often the best way of learning course material. In addition, students are encouraged to ask questions of one another, and should be encouraged to do so regardless of the instructional methods utilized. Students can, and often do, learn

more from their peers than from instructors. (Department of Education--Pittsburg State University) Students working with one another can often work directly with each other and the instructor can be used as an "information exchange" for the students. (DuFrance and Neuson 1988) As a result of word processing being an applications type of course, schools will largely utilize a combination of various instructional methods. The exact methods will depend in large part upon the needs of the students, the personality of the instructor, the learning goals set forth by the instructor, and requirements of the course itself. Other instructional methods may consist of: discussion, independent study, team learning, role playing, simulations, and brainstorming. (Armstrong, 1980) In short, an instructor should consider using more than one instructional method--if for no other reason than to break the daily monotony. By doing something different, the instructor can often enhance learning and increase interest and motivation.

With respect to testing, test questions can be categorized into six areas. Testing must be included in instruction regardless of the method(s) chosen. These six areas are: knowledge, comprehension, application, analysis, synthesis, and evaluation.

(Clegg and Owens, 1984) A test should consist of a number of categories of questions, in various formats, in order to give students the opportunity to perform to the best of their ability. Assigning a grade to a test can be as difficult, if not more so, than the process of constructing the test. Three general grading systems are in use today in education: 1) grading performance based on individual improvement over past performance, 2) grading based on individual performance as compared to group performance, and 3) grading based on individual performance as compared to a predetermined standard. Grading on individual improvement is widely recognized as the student taking a pretest and given another test after the material, or treatment, has been taught. The two grades are compared and a grade is assigned. Students will be motivated to a higher level of performance if grades are used to motivate. This approach is recognized as being based on the humanistic psychology in education. (Armstrong, 1980)

Chapter Three

METHODS AND DATA

Designing The Questionnaire

This study is a descriptive study consisting of a random sample of word processing instructors in selected area secondary level schools in addition to all community colleges in the State of Kansas.

Information will be gathered through the use of a questionnaire. The questionnaire consisted of 25 items using the Likert Scale to determine instructional methods used in the classroom, change in instructional methods, word processing course enrollment increase or decrease, and whether a word processing course is required under the general education requirements for graduation or if not, has discussion been centered toward this requirement.

The reliability of the questionnaire was established using a test-retest procedure of the instructors of word processing in two of the Regent's Institutions in the State of Kansas. In addition, several selected Labette Community College and Fort Scott Community College extension site staff members were utilized in determining reliability of the

questionnaire. The questionnaire will be subjected to the Pearson's Product-Moment Correlation Coeficient test after the retest. If the correlation coeficient is less than .85, the questionnaire will be revised and reliability will be determined.

Validity of the questionnaire was established utilizing the Publications Committee of the National Business Education Association. The author used a simple majority in determining whether to include or delete a given question from the final questionnaire.

Collection of Data

After validity has been established, the questionnaire was sent to all twenty-five community colleges located in the State of Kansas in addition to twelve randomly selected secondary schools in Southeast Kansas. The questionnaires will be designed so they can be completed in a minimum amount of time, so as to encourage a response ratio which will be a minimum of sixty percent. Cates (1987) states that this level of response for questionnaires is the minimum acceptable in order to base research findings.

Procedures for Treating Data

After the data has been gathered, a correlation coeficient with a corresponding t-test was utilized to determine the statistical significance between the two groups. The formulas are as follows:

$$r = \frac{\Sigma xy - n\bar{x}\bar{y}}{\sqrt{(\Sigma x^2 - n\bar{x}^2)(\Sigma y^2 - n\bar{y}^2)}}$$

$$t = \frac{r \cdot \sqrt{n-2}}{\sqrt{1-r^2}}$$

The null hypothesis will be rejected if there is a statistical difference between the two groups at the .05 level of significance.

Chapter Four

RESULTS

A total of 27 questionnaires were received out of 37 sent for a response ratio of 73%. Breaking this down to educational levels, out of the questionnaires sent to 12 randomly selected area secondary school word processing instructors, 11 completed and returned the questionnaire for a response ratio of 92%. Out of 25 questionnaires sent to all community college word processing instructors in the State of Kansas, 16 completed and returned the questionnaire for a response ratio of 64522

The results of the study showed that there was no significant difference between instructional methods utilized by secondary level and community college instructors of word processing courses. With respect to individual methods of instruction, many respondents stated that they use a mixture of methods, i.e., a combination of lecture, demonstration, and hands-on use. Since word processing is an applications course, a student will largely learn by doing so. Therefore, hands-on learning is to be expected. In addition, results showed that students are free to experiment on the computer. In other

mixture of methods, i.e., a combination of lecture, demonstration, and hands-on use. Since word processing is an applications course, a student will largely learn by doing so. Therefore, hands-on learning is to be expected. In addition, results showed that students are free to experiment on the computer. In other words, students are encouraged to try various commands in a given word processing software package to see how those commands work. Here again, experience is the best way to learn.

Of the instructors responding to the questionnaire, many reported that they offer the same word processing courses each semester/year. However, when adjusting their course content as to software packages covered, many instructors take into consideration the software packages offered by area business firms. This is in large part due to the fact that area business firms have the potential to hire students completing the courses in word processing. To ensure that word processing courses are as current as possible, all but two respondents reported that their course content is evaluated each semester/year.

Many respondents reported that there is more than one qualified instructor to teach the word processing courses which are offered each semester/year. It should be noted that the word

"qualified" can be interpreted in various ways. On the secondary level, "qualified" would primarily mean being certified in that area by a given state's department of education. However, on the community college level, "qualified" may mean certification or having on-the-job experience, or a combination of these factors. However, other respondents reported that only one qualified instructor is available for the word processing courses which are offered. Regardless of the number of instructors available for these courses, a large majority of respondents reported that time during class is allotted for the purpose of allowing students to complete a portion, if not all, of their assignments in class.

In addition to the number of instructors available for word processing courses, computer laboratories are available for student's use. The purpose of computer laboratories is to provide an environment for students to be able to complete course assignments in addition to assignments in other courses. It is understood that although many instructors allow regular class time for the purpose of completing assignments, some students may not complete those assignments and as a result must complete them outside of class. It is also recognized that in other courses, reports are assigned which can

be completed on a word processor and the availability of a computer laboratory makes it possible for students to utilize word processing. In addition, in a course such as word processing, the more a student uses a computer, the more comfortable the student will feel. As a result, the quality of the student's work will increase and a higher confidence level will be achieved.

Staffing of computer laboratories is largely handled by personnel other than regular classroom instructors. Often students learn as much, if not more, from their peers as they do from their instructors. Using students as computer laboratory staff members is beneficial in that regard; in addition to allowing regular classroom instructors to devote their time to teaching and course preparation. Providing laboratories for students' use gives them the opportunity to teach themselves to be computer literate, at least to some extent.

With respect to including a word processing requirement for graduation (as a general education requirement), several respondents stated that at least some discussion had been devoted to this matter. The majority of respondents, however, stated that they do not require word processing as a requirement for raduation unless word processing is required as a part of a student's curriculum.

In the area of current word processing software packages being utilized in community colleges and area secondary schools, the vast majority of secondary schools used Appleworks in their word processing courses. WordStar and Word Perfect were also mentioned as being included in these courses.

Results from instructors on the community college level stated that a variety of software packages are taught in their courses in word processing. On this level, WordPerfect and DisplayWrite are the two most common packages taught. It is interesting to note that WordPerfect was frequently mentioned as a package taught on each level covered by this survey. This is due to the fact that many businesses are instituting WordPerfect due to its powerful capabilities. (Patricia Soucy Interview) Other packages being taught on several campuses include: WordStar, WordStar 2000, Microsoft Word, and Leading Edge. On the community college level, Appleworks was rarely mentioned as being taught. This is in large part due to the fact that although Appleworks is common for personal and educational use, it is not commonly found in business environments.

It is clear from the results of the survey that students in word processing courses on either the

secondary level or the community college level are exposed to a number of software packages. This is important due to the fact that increased exposure will allow students to develop confidence in their ability to work with a given package. In addition, although many software packages have unique aspects, word processing theory is almost identical to every package. As a result, once students are on the job, they may come across a software package with which they are not familiar. However, with the experience and confidence that those students gained in the classroom, they should be able to adapt to any software package they might encounter.

Chapter Five

SUMMARY AND CONCLUSIONS

Review of Findings

From a review of the results of the questionnaire, the main points achieved are:

1. Research indicates that many different instructional methods are used by instructors in word processing courses.

2. With respect to the types of methods used in secondary-level classrooms as compared to community college classrooms, research indicates that there is no difference.

3. The type of instructional method used in a given classroom will depend upon the instructor's preference, the needs of that class, and the objectives of the course.

4. Attention should be given to the individual word processing software packages used in area business firms in order for the instructor to make a valid decision as to what word processing software package(s) should be taught in a word processing course.

5. Although word processing is in common use in schools and in business, at the current stage, it will not replace the typewriter.

Conclusions

Research shows that there are many factors which should be taken into account in teaching a course in the area of word processing. The main point to remember is that from a teaching standpoint, the teacher must be themselves. They cannot "act" like another teacher regardless of how successful the other is. If a teacher attempts to "act" like a different person, students will readily see through this and as a result, lose all respect for that teacher. This is not to say that a teacher should not be eclectic in his/her approach to teaching. However, what works well for one teacher in a given situation may be a total disaster in another situation. A teacher needs to combine the advantages of the various methods of teaching and apply those to each classroom environment since each class is different although the course content will largely be the same.

Recommendations

Instructors need to be aware of their student's backgrounds in word processing prior to deciding upon a distinct method(s) of instruction. Instructors

should also be adaptable to a change in instructional methods if the need for change presents itself. To be adaptable to change, instructors should be encouraged to have their students complete an anonymous questionnaire with respect to teaching methods employed by that instructor. Used in the right manner, as constructive criticism, evaluations completed by students can be a useful tool in determining the effectiveness of a particular instructor and the methods employed.

Students should be encouraged to to develop their own ideas as well as to explore and implement them. Student progress should not be discouraged at any time, especially since most people will learn more from experience than from any other type of learning environment. Experience from the point of transferring what has been learned in the classroom to the job itself is very important and cannot be overemphasized. People must be supportive of this transfer of knowledge since today's students are the leaders of tomorrow. In addition, people must be willing to share information since often people can learn as much from their peers as they can from an instructor.

It is recommended that a future study be conducted to ascertain whether instructional methods

change over time. In addition, following all ethical considerations, a future study could take into account the grade point averages of students enrolled in a given word processing course at the beginning of the course, the instructional methods used in that particular word processing course, and the course grade achieved by the students in that course. One objective would be to ascertain if any particular instructional method would be better for the purpose of assisting students will lower grade point averages to achieve at the same level of students with higher grade point averages. Some ethical considerations involved would include student granting written permission to the person conducting the research allowing access to their grade point averages, course grades, and other data which the researcher finds relevant to the study.

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Appendix A

COPY OF QUESTIONNAIRE USED IN THIS SURVEY

WORD PROCESSING SURVEY

Please circle the number which represents your current situation with respect to word processing courses. The range of numbers (1 through 5) are represented with 1 being never and 5 being always.

The information gathered from this survey will be used only for a study which is directly related to a thesis for the author's MS degree. PLEASE OMIT YOUR NAME AND SCHOOL. All information will remain confidential on an individual survey basis. Thank you for your assistance in this matter.

I. Course Construction and Instruction

1. Do you offer the same word processing software packages each semester? 1 2 3 4 5

2. Do you have several qualified instructors to teach your word processing courses each semester? 1 2 3 4 5

3. Do you only have one qualified instructor to teach your word processing courses each semester? 1 2 3 4 5

4. Although your word processing courses are one semester in length, are there any which are continued into a second semester i.e. Word Processing I to Word Processing II? 1 2 3 4 5

5. Do you allow class time for students to work on assignments made in word processing? 1 2 3 4 5

6. Are computer laboratories available for students' use to complete word processing assignments? 1 2 3 4 5

7. Are computer laboratories, if any, staffed by regular instructors? 1 2 3 4 5

8. Do you use several types of instructional methods in your word processing courses? 1 2 3 4 5

9. Do you actively use "hands-on experience" as an instructional method? 1 2 3 4 5

10. Do you actively use demonstration in your instructional methods? 1 2 3 4 5

11. Do you actively use lecture in your instructional methods? 1 2 3 4 5

12. Are students free to experiment on the computer, i.e., try various commands in a given word processing software package to see how those commands work? 1 2 3 4 5

II. Course History

1. Since your word processing courses have been offered, has the enrollment in those courses increased? 1 2 3 4 5

2. When deciding upon new word processing software packages to be offered, do you consider the current word processing software packages which are utilized by area business firms? 1 2 3 4 5

3. Do you evaluate your course content each semester? 1 2 3 4 5

4. Are your word processing courses required as part of your general education requirements for graduation? 1 2 3 4 5

5. If word processing is not required under your general education requirements for graduation, has any thought been given to doing so? 1 2 3 4 5

III. Specific Word Processing Software Packages

1. Do you offer, or have you offered, the LEADING EDGE software package? 1 2 3 4 5

2. Do you offer, or have you offered, WORDSTAR? 1 2 3 4 5

3. Do you offer, or have you offered, MULTIMATE? 1 2 3 4 5

4. Do you offer, or have you offered, WORDSTAR 2000? 1 2 3 4 5

5. Do you offer, or have you offered, WORDPERFECT? 1 2 3 4 5

6. Do you offer, or have you offered, MICROSOFT WORD? 1 2 3 4 5

7. Do you offer, or have you offered, DISPLAYWRITE? 1 2 3 4 5

8. Do you offer, or have you offered, any word processing packages which require an APPLE computer? 1 2 3 4 5

Appendix B

SUMMARY OF RESULTS

WORD PROCESSING SURVEY

Please circle the number which represents your current situation with respect to word processing courses. The range of numbers (1 through 5) are represented with 1 being never and 5 being always.

The information gathered from this survey will be used only for a study which is directly related to a thesis for the author's MS degree. PLEASE OMIT YOUR NAME AND SCHOOL. All information will remain confidential on an individual survey basis. Thank you for your assistance in this matter.

I. Course Construction and Instruction — AVG

1. Do you offer the same word processing software packages each semester?	1 2 3 4 5	5.00
2. Do you have several qualified instructors to teach your word processing courses each semester?	1 2 3 4 5	1.00
3. Do you only have one qualified instructor to teach your word processing courses each semester?	1 2 3 4 5	5.00
4. Although your word processing courses are one semester in length, are there any which are continued into a second semester i.e. Word Processing I to Word Processing II?	1 2 3 4 5	1.00
5. Do you allow class time for students to work on assignments made in word processing?	1 2 3 4 5	5.00
6. Are computer laboratories available for students' use to complete word processing assignments?	1 2 3 4 5	5.00
7. Are computer laboratories, if any, staffed by regular instructors?	1 2 3 4 5	5.00
8. Do you use several types of instructional methods in your word processing courses?	1 2 3 4 5	5.00
9. Do you actively use "hands-on experience" as an instructional method?	1 2 3 4 5	5.00
10. Do you actively use demonstration in your instructional methods?	1 2 3 4 5	4.60
11. Do you actively use lecture in your instructional methods?	1 2 3 4 5	4.40
12. Are students free to experiment on the computer, i.e., try various commands in a given word processing software package to see how those commands work?	1 2 3 4 5	5.00

II. Course History

1. Since your word processing courses have been offered, has the enrollment in those courses increased?	1 2 3 4 5	3.75
2. When deciding upon new word processing software packages to be offered, do you consider the current word processing software packages which are utilized by area business firms?	1 2 3 4 5	5.00
3. Do you evaluate your course content each semester?	1 2 3 4 5	5.00
4. Are your word processing courses required as part of your general education requirements for graduation?	1 2 3 4 5	1.00
5. If word processing is not required under your general education requirements for graduation, has any thought been given to doing so?	1 2 3 4 5	2.20

III. Specific Word Processing Software Packages

1. Do you offer, or have you offered, the LEADING EDGE software package?	1 2 3 4 5	1.00
2. Do you offer, or have you offered, WORDSTAR?	1 2 3 4 5	1.40
3. Do you offer, or have you offered, MULTIMATE?	1 2 3 4 5	1.40
4. Do you offer, or have you offered, WORDSTAR 2000?	1 2 3 4 5	1.00
5. Do you offer, or have you offered, WORDPERFECT?	1 2 3 4 5	1.40
6. Do you offer, or have you offered, MICROSOFT WORD?	1 2 3 4 5	1.00
7. Do you offer, or have you offered, DISPLAYWRITE?	1 2 3 4 5	1.00
8. Do you offer, or have you offered, any word processing packages which require an APPLE computer?	1 2 3 4 5	3.80

Community College

WORD PROCESSING SURVEY

Please circle the number which represents your current situation with respect to word processing courses. The range of numbers (1 through 5) are represented with 1 being never and 5 being always.

The information gathered from this survey will be used only for a study which is directly related to a thesis for the author's MS degree. PLEASE OMIT YOUR NAME AND SCHOOL. All information will remain confidential on an individual survey basis. Thank you for your assistance in this matter.

I. Course Construction and Instruction

			Avg
1.	Do you offer the same word processing software packages each semester?	1 2 3 4 5	4.13
2.	Do you have several qualified instructors to teach your word processing courses each semester?	1 2 3 4 5	3.71
3.	Do you only have one qualified instructor to teach your word processing courses each semester?	1 2 3 4 5	3.50
4.	Although your word processing courses are one semester in length, are there any which are continued into a second semester i.e. Word Processing I to Word Processing II?	1 2 3 4 5	4.00
5.	Do you allow class time for students to work on assignments made in word processing?	1 2 3 4 5	4.25
6.	Are computer laboratories available for students' use to complete word processing assignments?	1 2 3 4 5	4.88
7.	Are computer laboratories, if any, staffed by regular instructors?	1 2 3 4 5	3.50
8.	Do you use several types of instructional methods in your word processing courses?	1 2 3 4 5	4.88
9.	Do you actively use "hands-on experience" as an instructional method?	1 2 3 4 5	4.63
10.	Do you actively use demonstration in your instructional methods?	1 2 3 4 5	4.75
11.	Do you actively use lecture in your instructional methods?	1 2 3 4 5	4.38
12.	Are students free to experiment on the computer, i.e., try various commands in a given word processing software package to see how those commands work?	1 2 3 4 5	4.63

II. Course History

1. Since your word processing courses have been offered, has the enrollment in those courses increased?	1 2 3 4 5	4.60
2. When deciding upon new word processing software packages to be offered, do you consider the current word processing software packages which are utilized by area business firms?	1 2 3 4 5	4.50
3. Do you evaluate your course content each semester?	1 2 3 4 5	4.75
4. Are your word processing courses required as part of your general education requirements for graduation?	1 2 3 4 5	2.38
5. If word processing is not required under your general education requirements for graduation, has any thought been given to doing so?	1 2 3 4 5	2.40

III. Specific Word Processing Software Packages

1. Do you offer, or have you offered, the LEADING EDGE software package?	1 2 3 4 5	2.71
2. Do you offer, or have you offered, WORDSTAR?	1 2 3 4 5	3.29
3. Do you offer, or have you offered, MULTIMATE?	1 2 3 4 5	2.14
4. Do you offer, or have you offered, WORDSTAR 2000?	1 2 3 4 5	2.71
5. Do you offer, or have you offered, WORDPERFECT?	1 2 3 4 5	4.88
6. Do you offer, or have you offered, MICROSOFT WORD?	1 2 3 4 5	2.71
7. Do you offer, or have you offered, DISPLAYWRITE?	1 2 3 4 5	4.25
8. Do you offer, or have you offered, any word processing packages which require an APPLE computer?	1 2 3 4 5	1.63