

THE DEVELOPMENT OF INDIVIDUALIZED LEARNING PACKETS  
IN FIRST-YEAR BOOKKEEPING AND AN EVALUATION  
OF THEIR EFFECTIVENESS

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by  
Sister Joan Backes  
August, 1974

Then  
14<sup>th</sup>  
E

R. B. Russell  
Approved for the Major Department

Serge K. Walters  
Committee Member

Laura M. Cantie  
Committee Member

Harold E. Dunt  
Approved for the Graduate Council

352300<sup>8</sup>

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## Chapter 1

### INTRODUCTION

The educational system in today's era is in need of constant research, evaluation, and change. In the past, the educational program in the American school system revolved around group learning in a traditional classroom. Instruction was geared to the entire group of students rather than to the individuals within that group. This type of instruction is still present to some extent within the system.

A movement in education today is toward the development and fulfillment of the needs of individual students. The point of contention is that students must learn to think for themselves and to become responsible for their learning. Teachers are also beginning to realize the importance for the individual to be able to progress at his own speed according to his individual abilities and interests.<sup>1</sup> More effective techniques in teaching are being developed in order to help cope with the wide range of individual abilities and interests.

The time has come for the school to be a more humanizing social institution capable of developing creative and imaginative individuals in society.<sup>2</sup> The challenge and need is present now. Are schools and teachers attempting to meet it?

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<sup>1</sup>Neal B. Dover, "Individualized Instruction Offers Challenge," Business Education Forum, XXV (December, 1970), 17.

<sup>2</sup>Lloyd K. Bishop, "Individualizing Educational Programs," Business Education Forum, XXV (May, 1971), 13.

## The Problem

In the teaching of bookkeeping the procedure used for instruction is questioned at times. There is a continual search for the method of instruction that would benefit most of the students. In an endeavor to arrive at some answers to this problem the following research was undertaken.

### Statement of the Problem

The purpose of this study was to develop learning packets for individualized instruction for first-year bookkeeping and to evaluate the effectiveness of these packets using this method of instruction at Mater Dei High School, Breese, Illinois.

### Importance of the Study

Learning takes place individually; consequently, the method used for instruction should center around the individual student.<sup>1</sup> What method would best help individuals with different abilities in the same class is the question to be answered by educators today. There is evidence that only between 15 or 20 percent of the students at a particular grade level may actually be working at that level.<sup>2</sup> This means that 80 to 85 percent of the students are working above or below the grade level designated for them.

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<sup>1</sup>Ibid.

<sup>2</sup>William E. Palton, John J. Hunt, and Lyle L. Berg, "Preplanning for Individualized Instruction," Business Education Forum, XXVI (December, 1971), 14.

Specifically, in the study of bookkeeping, the method of instruction used should not bore the intelligent student or lose the slower student. Also, this method should allow for a variance in the amount of work required from a student in order to complete a unit or course in bookkeeping satisfactorily. The length of time it would take a student to complete a course would and should vary because of the difference in the student's ability, initiative, and competence.

In view of what has been stated above, it is essential for educators to use a method of instruction beneficial for all students. In order to help determine the best method of instruction for different ability groups in the study of bookkeeping, the following research project on individualized instruction was conducted.

#### Delimitations

This study was delimited to a two-year period of first-year bookkeeping instruction using the textbook, Century 21 Accounting, 24th edition, from 1972-1974 at Mater Dei High School, Breese, Illinois. It was further delimited to 59 bookkeeping students for the first year and 31 bookkeeping students for the second year.

#### Limitations

This study was limited by the lack of control over the extent individualized instruction was used by bookkeeping students in other classes in the school. It was further limited by a traditional schedule in the school system and by this being the first two years individualized instruction was used in bookkeeping.

## Definition of Terms

### Behavioral or Performance Objective

This is a statement clearly indicating how well a student must perform a given behavior action under particular conditions.<sup>1</sup>

### Individualized Instruction

It is that method of instruction where a student advances through a course at the rate of speed that he is able to demonstrate to the instructor the competency designated by specific behavioral objectives.<sup>2</sup>

### Individualized Learning Packet

A unit of study developed by the teacher for use individually or in groups by the student. Individual differences are recognized in the packets and assignments are designed to meet the needs and abilities of the students.

## Methods of Procedure

This study on individualized instruction in bookkeeping covered a period of two years. The first year was considered a pilot study with some data collected from the group. The second year was used to perfect the individualized learning packets and the use of these packets in a bookkeeping class. The packets were used by all the students both years. Since the high school was on a traditional schedule, all students were

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<sup>1</sup>James Weigand (ed.), Developing Teacher Competencies (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971), p. 44.

<sup>2</sup>Leonard J. West, "Individualization of Instruction," Business Education Forum, XXV (May, 1971), 20.

required to come to class daily with an exception given once the course was completed.

### First-Year Procedure

For the first year the following procedures were followed:

(1) An introductory packet for the students was prepared. Included in this packet were the overall objectives for the bookkeeping course, a syllabus, guidelines for the number of packets to be completed at the end of each quarter, the evaluation utilized, a schedule for taking tests and for chapter explanations, and the required materials for the students taking the bookkeeping course.

(2) The eleven required individualized learning packets for the students were written. These packets included the primary idea, secondary ideas, the rationale, the behavioral objectives, required activities, optional activities, self-tests, and post-tests. The eleven packets included twenty-nine chapters and two practice sets. Everyone was to complete these packets as a minimum requirement for the course.

(3) On the first day of class the introductory packet was explained to the students, along with the procedures to be followed by the students. An attitude questionnaire was then given to each student to fill out.

(4) On the second day of class the first individualized learning packet was given to the students along with directions for completing the first chapter of the packet. After this, the students continued to work individually on the packets.

(5) At the end of the school year the number of packets completed satisfactorily by the students along with their final grades was compiled and evaluated by the teacher.

(6) At the completion of the course the first year, the students were again given the attitude questionnaire in order to make comparisons with the first questionnaire.

(7) At this point the learning packets and the method for using these packets were reorganized in preparation for the second year.

### Second-Year Procedure

For the second year the following procedures were followed:

1. The introductory packet similar to the one given the students the first year was presented to the students.

2. The individualized learning packets were prepared for use the second year. With the experience of using these packets for one year the following changes were made: (1) More packets were prepared for the students thus giving the students some options on which ones to complete. Some of the packets were required for all students. (2) The first packet was presented to the students by the teacher in order to aid them in proceeding through the packets with more responsibility. A student could work individually through this first packet if he desired to do so and was able to keep up with the pace of the class. (3) At the completion of every packet an interview was conducted with the students in order to go over the unit test and the problem test and to discuss the progress of the individual student. (4) The progress of all the students was evaluated very carefully by the teacher throughout the first quarter.

3. The attitude questionnaire was given to the students both at the beginning and at the end of the bookkeeping course. A comparison of these results was observed.

4. The number of packets completed satisfactorily by the students as well as their final grades was compiled and evaluated by the teacher.

5. Based on the information acquired from the use of the learning packets for two years in the study of bookkeeping, the packets were revised and the requirements for the course were re-evaluated.

## Chapter 2

### REVIEW OF RELATED LITERATURE

In the American school system, education has been geared to groups of students evidenced through the use of traditional scheduling and the self-contained classroom. In this pattern of education, the individual is neglected or becomes a secondary consideration.<sup>1</sup> That individuals do differ has been a fact apparent to all educators. The more recent awareness of these differences by educators generated a reevaluation of education.

In reevaluating education today, it is beneficial for educators to conceive that in the past a few educators centered learning around the individual. As early as the latter part of the nineteenth century different approaches to individualized instruction were established in the United States. Two men who were responsible for working primarily against the age-grade pattern of organization in education were Preston Search and John Dewey.<sup>2</sup> At that time the objective was to find a way of presenting subject matter to the child which could be mastered at his own speed. Credit for starting the movement to "personalize instruction" goes to John Dewey, while Preston Search may be perceived as one of the originators of individualized instruction.<sup>3</sup>

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<sup>1</sup>Lloyd K. Bishop, "Individualizing Educational Programs," Business Education Forum, XXV (May, 1971), 13.

<sup>2</sup>John M. Mickelson, "Personalized Instruction: How New Is It?" The Education Digest, XXXVIII (November, 1972), 38.

<sup>3</sup>Ibid.

## Individualized Instruction

The method of instruction to be considered in this paper is that of individualized instruction and the use of this instruction in the teaching and learning of bookkeeping. The use of individualized instruction is misunderstood by some and frightening to others. The old habits and attitudes of some educators toward teaching make it difficult to consider or even adjust to a new method of instruction.

Obviously, this approach to education is not without shortcomings. More time, effort, and thought toward this method of education are essential. Educators are unable to ignore it altogether. "Today, flexibility, freedom to learn, and adjustment to individual differences are axiomatic."<sup>1</sup>

Education must continue to keep the individual in mind. Functions which must become a part of the interaction process between teacher and students are:

1. to help the student learn to study properly not just the conventional homework, but other study skills that must be developed to survive in a highly technical age;
2. to provide an opportunity for creative thinking and exploration;
3. to encourage analytical and critical thinking through emphasis or inquiry;
4. to provide and encourage the student's pursuit of individual interests;
5. to inculcate individual student responsibility for making decisions relevant to his education.<sup>2</sup>

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<sup>1</sup>Alvin C. Eurich, "I Remember Education in the Year 1972," The Education Digest, XXXVIII (November, 1972), 34.

<sup>2</sup>W. Deane Wiley and Lloyd K. Bishop, The Flexibly Scheduled High School (West Nyack, New York: Parker Publishing Company, Inc., 1968), p. 138.

The most fundamental objective of individualized instruction is that the student must become aware of the fact that he can learn something almost anytime or any place, with or without the school.<sup>1</sup>

How does individualized instruction function in a school system? During the operation of this type of instruction, ideally, each individual student is on his own track and has his own course of instruction designed for him. In working through the course he progresses at his own rate. The rate of each student would vary. This would be governed to a great extent by his background, interest, and ability. Using this type of instruction his only competition would be himself. Only in a general way would he be competing with the group.<sup>2</sup>

Broad areas of possibilities are available for educators using individualized instruction. Different programs which attempt to consider individual differences vary from one situation to another. In an endeavor to meet these differences, new schedules and methods need to be organized within the school. A common method used is that of flexible or modular scheduling. In using this method of scheduling large-group and small-group instructional modes would be applied. The use of team teaching could be employed. The amount of scheduled time and free time for individuals would vary from one student to another. Those students who demonstrate a high degree of responsibility and initiative could use free time beneficially and thus would be scheduled for this.

For a system to work on a strickly individualized basis, grades should be removed. Students would be required to work on the instruction,

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<sup>1</sup>Ibid., p. 137.

<sup>2</sup>Bishop, op. cit.

activities or objectives of an individualized packet to the degree of competency and knowledge required for that particular packet. When this degree is acquired, the student would be able to proceed to the next instruction or the next packet. Again, the length of time it would take for a student to display a particular skill or knowledge would vary. A student would not fail but continue to work until a passing level is acquired. Thus, a program which is geared to learning on a continuous nongraded basis is developed.<sup>1</sup>

One phase of the individualized instruction that cannot be overlooked is the needed resource center. This center would be a place where students are able to gather together needed information on a specific topic, or the students would be able to study in groups or individually. Also, study carrels at various locations throughout the school would be beneficial for individuals who need study places. Facilities are a definite needed aspect for developing and implementing this approach to education.

In implementing this approach to education, the role of the teacher must change. Educators need to permit students freedom of movement in the school and become accustomed to seeing students out of their regular places in a classroom. Teachers must also become aware that students are not in need of constant supervision in order to succeed. Instead, a teacher must be available to the students for interactions with them. With this approach, the teacher and student hopefully become partners in education.

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<sup>1</sup>Ibid.

### Individualized Learning Packets

The teaching methods employed within a schedule where the individual is the center of learning might include the concept of continuous progress and the development of individualized learning packets. The use of these packets would serve as a guide for continuous progress for the students. Both of these methods would be employed simultaneously in education.

The initial step in beginning individualized instruction is the use of the pretest. These must be given to the students so that the level of entrance in a particular course or unit may be determined. It might be necessary to use the pretest only at the beginning of a course. Sometimes these tests are given for the beginning of a new unit within the course also.

In the development of the individualized learning packet the first thing a teacher must consider is the content to be included in a particular unit. Along with this, the more common elements of the individualized learning packet are the title, and the subtitles of the area to be covered. The rationale is also stated which would present how this specific unit relates to the other units that have been covered or will be covered in the future.

An important element of the learning packet is the behavioral objective. The purpose of the behavioral objective is to state specifically the learning outcomes at various performance levels and in definite behavioral terms.<sup>1</sup> Caution on the part of the educator must be taken when the objectives are composed.

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<sup>1</sup>Ibid., p. 14.

It is recognized with the use of behavioral objectives that teachers need to be more precise and explicit in stating instructional goals and develop techniques for measuring specific performances expected by students in the attainment of any concept or skill.<sup>1</sup>

Along with the specific objectives for a unit the teacher would give different required learning experiences as well as optional learning activities. These optional activities would be completed by those students who would need to complete them in order to acquire a specific behavioral objective.

At the end of the packet a self test would be available for the use of the student in order for him to evaluate his own knowledge on the unit before proceeding to the final test which is called the post test. The post test is given to the student to help determine how well he mastered the content in the unit.

At this point of the instruction it would be wise for the teacher to discuss the progress rate with the individual student. It would also be necessary for them to determine together whether to advance to the next learning packet or to recycle a particular area or areas of the packet before advancing to new material. It is definitely advisable that this decision be a joint one on the part of the teacher and the student.

#### Individualized Instruction in Bookkeeping

Different methods and areas of research have taken place in the area of individualized instruction in bookkeeping. Some of the recent research in connection with individualized instruction, programmed instruction, and improving methods in bookkeeping are taken into consideration here.

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<sup>1</sup>Ibid.

In a study conducted by Bedke on the development and evaluation of using programmed instruction for the study of the purchases journal in bookkeeping, he concluded that ". . . programmed instruction produced results as good as conventional instruction and could be a desirable learning tool in bookkeeping."<sup>1</sup>

In another study on programmed instruction conducted by Gibbs, Hunt, and Fahrner, it was discovered that programmed materials better equip students to handle problem-solving tasks, and that the use of programmed material allowed for better mastery by poor students since they are able to complete the material at their own speed.<sup>2</sup> It was further concluded in the study that ". . . programmed materials can be effectively used in learning situations where there is little or no supervision such as for homework."<sup>3</sup>

In 1967, using two control groups and two experimental groups Tell, in his study on "Enriching Bookkeeping Classes by Integrating Economics," concluded that too much time in bookkeeping classes was devoted to the preparation of exercises and problems. Similar findings were also recorded by Griffith in 1964.<sup>4</sup>

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<sup>1</sup>Ruby C. Bedke, "The Development and Evaluation of a Unit of Programmed Instruction for the Purchases Journal in Bookkeeping," Business Education Forum, XXV (October, 1970), 26.

<sup>2</sup>B. June Schmidt, Contributions of Research to Business Education, ed. Calfrey C. Calhoun and Mildred Hillestad (Washington, D.C: National Business Education Association, 1971), p. 69.

<sup>3</sup>W. E. Gibbs, D. L. Hunt, and W. F. Fahrner, "Comparative Study of Conventional and Programmed Instruction in Bookkeeping," Journal of Educational Research LXI (March, 1968), 323.

<sup>4</sup>Schmidt, op. cit., p. 70.

Speer at Appalachian State University conducted a study on implementing the individualized instruction method in accounting to determine if the learning outcomes are greater for the students who are taught by this method. The author believed that the overall amount of knowledge gained by both the traditional and individualized student was about equal. However, it was apparent that the best and poorest students did better under individualized instruction.<sup>1</sup>

In a recent study conducted by Fritz it was discovered that individualized units prepared for advanced bookkeeping students enabled both the beginning and advanced classes to be held in conjunction. A recommendation resulting from this study for promoting greater understanding and interest was the availability and the use of accompanying audio visuals.<sup>2</sup>

Nuessen, in her research study on the use of individualized instruction in bookkeeping detected the existence of fewer failures in the class, a favorable attitude toward learning bookkeeping, and no significant changes in student grades.<sup>3</sup>

Daily concluded no significant difference in achievement in accounting as measured by the American Institute of Certified Public

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<sup>1</sup>Charles C. Speer, "An Experiment in Individualized Instruction in Accounting," Business Education Forum, XXVII (October, 1972), 60.

<sup>2</sup>Julia Fritz, "The Development of Individualized Units for Independent Study in Advanced Bookkeeping" (unpublished thesis, Kansas State Teachers College, 1972), p. 94.

<sup>3</sup>Faye Nuessen, "The Development and Evaluation of Individualized Study Packets for use by Bookkeeping Students at Yates Center High School, 1971-72" (unpublished thesis, Kansas State Teachers College, 1972), p. 57.

Accountant Achievement Tests taught by the programmed text-lectured method or the traditional text-lectured method.<sup>1</sup>

Glover discovered that the achievement in problem situations may be greater under the conventional teacher instruction as contrasted with programmed instruction in an elementary course in accounting.<sup>2</sup>

A study on the effects of audio-tutorial and programmed instruction laboratories on achievement in accounting principles conducted by Britts and Prickett,

. . . indicated that teacher-prepared programmed instruction materials are effective tools when used as a supplement to the traditional materials in teaching accounting principles. Compared to students who received traditional supplementary materials, students who received programmed instruction materials achieved the higher average scores on the criterion test.<sup>3</sup>

Research in education is necessary if the best method of instruction is desired.

Tonne (1966) recently suggested that the main purpose of research in business education should be the determination of the best methods of teaching and course content, and at least two-thirds of the bookkeeping research was directed to these purposes.<sup>4</sup>

Teachers must be in a constant search for improving methods for instruction. It must be stated that without the use of individualized

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<sup>1</sup>Victoria L. Daily, "The Effect of Programmed Instruction in the Teaching of Principles of Accounting," Business Education Forum, XXV (October, 1970), 29.

<sup>2</sup>Mildred W. Glover, "An Experiment in the Use of Programmed Instruction in Elementary College Accounting," Business Education Forum, XXVI (October, 1971), 35.

<sup>3</sup>Eugene F. Butts and Gary L. Prickett, "Teacher-Made Programs to Individualize Instruction," Business Education Forum, XXVI (January, 1972), 41.

<sup>4</sup>Schmidt, op. cit., pp. 68-69.

instruction in bookkeeping a teacher becomes too subject matter oriented. The amount and content to cover in the course is selected and organized to cover a predetermined amount of material in a specific time allotment. Students are all expected to acquire the same amount of information at the same time.<sup>1</sup>

This inflexible approach permits only a minimal consideration of the abilities and interests of individual students. It is oriented to meet administrative convenience rather than student accomplishment.<sup>2</sup>

Teachers are tempted by this convenience and are willing to stay in the traditional classroom atmosphere because of the security they feel with this method. In addition to this, some teachers lack sufficient educational preparation for individualized instruction, and are more comfortable teaching to a group rather than individually.<sup>3</sup>

In using individualized instruction in bookkeeping it is recommended that more than one course outline be written for the students. It is further advised that students help write the content for the course in order to make available to them their own interests and desires. There definitely must be flexibility in the selection of the subject matter. This flexibility for all the students in bookkeeping must be worked on gradually with the preparation of new packets by the teacher.

The objectives written for the course and for the individual packets must be realistic for the students and must meet the needs of the students. It takes a constant effort on the part of the teacher to adapt the course to meet the individual needs of the students.

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<sup>1</sup>F. Blair Mayne, "The Accounting Classroom--People, Activities, Content," Business Education Forum, XXIV (December, 1969), 17.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

A thorough knowledge of all bookkeeping principles are essential. In the study of bookkeeping it is necessary that a student understand fully a specific principle before proceeding further into the course. When a student progresses at an individual rate this would be possible. Consequently, the amount of time spent by the student on a particular topic of bookkeeping would differ.

In using individualized instruction in bookkeeping, the traditional method of lecturing may be employed. One method that might be followed would be for a teacher to present the fundamental bookkeeping cycle in a traditional lecture approach in order to help lay a good foundation for the students. Careful evaluation of this subject matter would be essential and those students who understand the material would be ready to proceed on an individualized basis. Those students having difficulty at this point would continue to receive additional directed help from the teacher.

Another important aspect to consider when using individualized instruction in bookkeeping is the use of sufficient evaluation. Comprehensive tests must be administered regularly. At the completion of a unit the material covered must be tested before new material is studied. Also, throughout the unit it is advisable to test specific points covered in a chapter or topic. In the evaluation process in bookkeeping, it is recommended that both the problem test and the objective or short answer test be used. These test results should be discussed with the student plus further questioning for understanding on specific topics before moving to the next unit. In the evaluation process it is also recommended to use oral evaluation at regular intervals. This would be an opportunity to evaluate the understanding and the "why" aspect of bookkeeping. In an

experiment on individualized instruction in accounting it was concluded that there needs to be a change made from the traditional method of evaluating students. "There should be more than just a final exam, since many students are fearful of taking a course in which their grade depends on a single exam."<sup>1</sup>

Just as an individual may succeed using individualized instruction, another individual might fail. "A mistake is made if the bookkeeping accounting teacher assumes that all students can function on an individual learning basis, progressing at their own rates."<sup>2</sup>

### Summary

The job of the educator today is not a small one. It demands a constant awareness of innovations in education and in turn implementing these innovations to the point that they would benefit the individual students.

The use of individualized instruction in education functions for the individual. With this method of instruction the individualized learning packets serve as guides toward continuous progress for the students. They enable students to proceed at a pace possible for them.

In the study of bookkeeping this method of instruction benefits students with different abilities. Students maintain an interest in the subject since they are able to advance through the course at a rate based

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<sup>1</sup>Speer, op. cit., p. 60.

<sup>2</sup>Neal B. Dover, "Individualized Instruction Offers Challenge," Business Education Forum, XXV (December, 1970), 17.

on their abilities. In using individualized instruction in bookkeeping the teacher faces the challenge of guiding each individual student toward greater achievement and thus greater accomplishments in the field of bookkeeping.

## Chapter 3

### THE USE AND EVALUATION OF INDIVIDUALIZED LEARNING PACKETS IN BOOKKEEPING

The use of individualized instruction in a school or in a specific classroom within the school demands the preparation of numerous materials. In this study the materials constructed took the form of individualized learning packets. These learning packets were initially prepared during the 1972-1973 school term for a first-year bookkeeping course. As the materials were developed, they were used for instruction by the students.

After the students used these learning packets for one year, the necessary revisions and corrections were devised for the improvement and promotion of learning. These revised packets were then utilized for the duration of the 1973-1974 school term.

#### The Evaluation of the First Year

The individualized learning packets were employed for the first time during the 1972-1973 school year with 59 students in two different classes of bookkeeping.

At the beginning of the year, the introductory packet along with the first chapter were discussed and explained to the students. After this explanation the students progressed through the learning packets individually and at their own rate.

At the outset, all the students were expected to complete satisfactorily nine packets. In addition to these nine packets, two other packets were developed for students who were interested in completing additional chapters in their study of bookkeeping.

The chapters of material covered in each packet were as follows: packet 1, chapters 1 through 6; packet 2, chapters 7 through 11; packet 3, chapters 12 through 17; packet 4, the Stereotronics Practice Set; packet 5, chapters 18 and 19; packet 6, chapters 20 through 22; packet 7, chapters 23 through 25; packet 8, chapters 26 through 29; packet 9, the Campers' Cove Practice Set. The two additional packets developed were: packet 10, chapters 30 and 31; and packet 11, chapters 32 and 33.

In coming to class daily the students would work on problems, read the material presented in the chapters, work in small groups on different activities, take tests, or seek individual help from the teacher. The students were free to ask the teacher for chapter explanations whenever necessary. Throughout the course, students were encouraged to meet the time allocated for them in the introductory packet.

Table 1, page 23, lists the number of packets finished, the number of students satisfactorily completing the specific packets, along with the final grades received by the students at the conclusion of the entire course.

Table 1 indicates that 43 students completed nine packets which was initially given as the minimum requirement for the course. However, it was observed by the teacher throughout the course that some students were incapable of accomplishing the minimum requirement satisfactorily within the time allotted. Consequently, those students completing seven packets or more were given a passing grade. As a result of this change,

Table 1

The Final Grades Received and the Number of Packets Completed Satisfactorily by First-Year Bookkeeping Students at Mater Dei High School, 1972-1973

Number of Packets Completed	Number of Students	Final Grades Received	Percent of Students
11	4	A	6.7
10	2	A	3.4
9	19	A	32.2
9	17	B	28.8
9	1	C	1.7
8	3	C	5.1
7	5	D	8.5
6	1	D	1.7
4	2	F	3.4
3	2	F	3.4
2	1	F	1.7
1	2	F	3.4

51 out of 59 students received a final passing grade at the culmination of the course.

At the commencement of the course, students were asked to complete an attitude questionnaire about bookkeeping and individualized instruction. After culminating their study of bookkeeping, they were again asked to respond to this questionnaire. Copies of the questionnaires appear on pages 90 and 91 in the Appendix.

Table 2, page 25, is comprised of the results of the attitude questionnaire taken at the beginning of the school term. Table 3, page 26, contains the results of this questionnaire gathered at the end of the year.

At this point of the study only those comparisons and observations on the more pertinent statements will be mentioned.

In responding to the first statement, a large percentage of students were in favor of the teacher presenting the material.

There were 17 students at the end, in comparison with four at the beginning, who responded with a strong agreement on liking to work on their own and acquiring knowledge on their own.

At the beginning of the school year, everyone was in agreement or at least neutral in responding to the statement that they were glad they enrolled in bookkeeping. At the end of the year, there were eight students who responded in disagreement to this statement.

A large number of students thought they would like individualized instruction when starting the course. Those students who thought they would like it, responded in favor of liking it at the end.

Another observation grasped from the results of the questionnaire was that the number of students who believed they would learn less using the individualized approach doubled from nine to 18.

Table 2

The Results of an Attitude Questionnaire Relating to Individualized Instruction  
in First-Year Bookkeeping Taken at the Beginning of the School  
Term at Mater Dei High School, 1972-1973

Question	<u>Strongly Disagree</u>		<u>Disagree</u>		<u>Neutral</u>		<u>Agree</u>		<u>Strongly Agree</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1) Instruction presented by teacher			3	5.0	16	27.1	26	44.0	14	23.7
2) Like to work on my own	1	1.7	7	11.9	20	34.0	27	45.7	4	6.7
3) Find school very boring	5	8.5	27	45.7	17	28.8	8	13.5	2	3.4
4) Glad I am taking bookkeeping					16	27.1	26	44.0	17	28.8
5) Like individualized instruction	2	3.4	8	13.5	7	11.9	34	57.5	3	5.0
6) Will learn less using this method	7	11.9	26	44.0	17	28.8	6	10.2	3	5.0
7) Will increase my ability to think			3	5.0	15	25.4	30	50.9	11	18.7
8) Not any better than other methods	5	8.5	26	44.0	16	27.1	11	18.7	1	1.7
9) Will feel isolated and alone	10	16.9	34	57.5	10	16.9	2	3.4	3	5.0
10) Uncertain about my performance	1	1.7	9	15.3	18	30.2	26	44.0	5	8.5
11) Will learn faster using this method	1	1.7	5	8.5	40	67.7	12	20.2	1	1.7
12) Will work harder using this method	2	3.4	3	5.0	22	37.2	23	39.0	9	15.3

Table 3

The Results of an Attitude Questionnaire Relating to Individualized Instruction  
in First-Year Bookkeeping Taken at the End of the School  
Term at Mater Dei High School, 1972-1973

Question	<u>Strongly Disagree</u>		<u>Disagree</u>		<u>Neutral</u>		<u>Agree</u>		<u>Strongly Agree</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1) Instruction pre- sented by teacher	3	5.0	8	13.5	15	25.4	25	42.4	8	13.5
2) Liked to work on my own	2	3.4	9	15.3	8	13.5	23	39.0	17	28.8
3) Found school very boring	11	18.7	24	40.6	15	25.4	6	10.2	3	5.0
4) Glad I took bookkeeping	1	1.7	7	11.9	15	25.4	24	40.6	12	20.2
5) Liked individual- ized instruction	6	10.2	8	13.5	8	13.5	31	52.5	6	10.2
6) Learned less using this method	8	13.5	29	49.1	4	6.7	11	18.7	7	11.9
7) Increased my ability to think	1	1.7	8	13.5	11	18.7	25	42.4	14	23.7
8) Not any better than other methods	5	8.5	23	39.0	16	27.1	13	22.0	2	3.4
9) Felt isolated and alone	15	25.4	28	47.5	6	10.2	8	13.5	2	3.4
10) Uncertain about my performance	5	8.5	23	39.0	19	32.2	10	16.9	2	3.4
11) Learned faster using this method	8	13.5	11	18.7	16	27.1	17	28.8	7	11.9
12) Worked harder using this method	5	8.5	9	15.3	9	15.3	28	47.5	8	13.5

At the beginning of the year, there were 13 students who thought they would learn faster using individualized instruction. After using the learning packets, there were 24 students who thought they did learn faster using this method of instruction.

### The Evaluation of the Second Year

After using the individualized packets for one year and evaluating their effectiveness in regard to student achievement and attitudes, several changes were made by the teacher in preparation for the second year.

It was observed from the number of failures the first year, that something needed to be done for the slow and unmotivated student who found it difficult to begin the study of bookkeeping. As a result of this, it was decided that the first packet would be presented to the entire class. An exception was made for those students who worked ahead of the class. In addition to this, the supervision of each student's individual progress throughout the first quarter was believed essential.

In addition to this, two revisions were made in the sequence and content of the packets. Since some students who were enrolled in bookkeeping also took a data processing course, the study of data processing was included as an optional packet for the students. A packet on understanding taxes was prepared as an additional optional packet.

An additional change was made in the course requirements in preparation for the second year. In view of the new arrangement of the chapters to be covered in the course, a minimum requirement for a passing grade would be the completion of six packets by the end of the course.

### The Final Grade Results

Table 4, page 29, lists the number of packets finished, the number of students satisfactorily completing the specific packets, along with the final grades received by the students at the completion of the entire course.

Table 4 indicates that four, or 12.9 percent, of the students completed ten packets for the course and received an A for the final grade. Five students, or 16.2 percent, completed nine packets and also received an A for the final grade. There was only one student who completed eight packets and received a B for the final grade. The largest percentage of students received a final grade of C. Eight students, or 25.8 percent, completed seven packets and received a C grade. Four students, or 12.9 percent, who almost completed seven packets also received a C grade. There were nine students, or 29 percent, who completed six packets and received a D as a final grade for the course. No students were given a failing grade at the end of the course.

### Questionnaire Data

At the beginning and again at the end of the course, the students were given an attitude questionnaire relating to individualized instruction in bookkeeping. The questionnaires used this second year were identical to those employed the previous year. Copies of the questionnaires appear on pages 90 and 91 in the Appendix.

Table 5, page 30, gives the results of the questionnaire taken at the beginning of the school term, while table 6, page 31, lists the results compiled at the end of the year. Table 7, page 32, is a comparison of data received at the beginning with that received at the end of the year.

Table 4

The Final Grades Received and the Number of Packets Completed Satisfactorily by First-Year Bookkeeping Students at Mater Dei High School, 1973-1974

Number of Packets Completed	Number of Students	Final Grades Received	Percent of Students
10	4	A	12.9
9	5	A	16.2
8	1	B	3.2
7	8	C	25.8
6+	4	C	12.9
6	9	D	29.0

Table 5

The Results of an Attitude Questionnaire Relating to Individualized Instruction  
in First-Year Bookkeeping Taken at the Beginning of the School  
Term at Mater Dei High School, 1973-1974

Question	<u>Strongly Disagree</u>		<u>Disagree</u>		<u>Neutral</u>		<u>Agree</u>		<u>Strongly Agree</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1) Instruction pre- sented by teacher			1	3.2	9	28.7	16	51.6	5	16.1
2) Like to work on my own	2	6.5	8	25.8	6	19.4	15	48.4		
3) Find school very boring	2	6.5	4	12.9	8	25.8	14	45.1	3	9.7
4) Glad I am taking bookkeeping	1	3.2			10	32.2	14	45.1	6	19.4
5) Like individual- ized instruction	1	3.2	4	12.9	6	19.4	12	38.8	8	25.8
6) Will learn less using this method	4	12.9	13	42.0	11	35.5	3	9.7		
7) Will increase my ability to think	2	6.5	6	19.4	10	32.2	12	38.8	1	3.2
8) Not any better than other methods	2	6.5	11	35.5	12	38.8	5	16.1	1	3.2
9) Will feel isolated and alone	3	9.7	13	42.0	9	28.7	5	16.1	1	3.2
10) Uncertain about my performance	1	3.2	9	28.7	11	35.5	9	28.7	1	3.2
11) Will learn faster using this method	1	3.2	8	25.8	12	38.8	9	28.7	1	3.2
12) Will work harder using this method	2	6.5	5	16.1	12	38.8	11	35.5	1	3.2

Table 6

The Results of an Attitude Questionnaire Relating to Individualized Instruction  
in First-Year Bookkeeping Taken at the End of the School  
Term at Mater Dei High School, 1973-1974

Question	<u>Strongly Disagree</u>		<u>Disagree</u>		<u>Neutral</u>		<u>Agree</u>		<u>Strongly Agree</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1) Instruction pre- sented by teacher	1	3.2	3	9.7	11	35.5	12	38.8	4	12.9
2) Liked to work on my own	2	6.5	4	12.9	7	22.6	9	28.7	9	28.7
3) Found school very boring	4	12.9	10	32.2	10	32.2	3	9.7	4	12.9
4) Glad I took bookkeeping			2	6.5	8	25.8	13	42.0	8	25.8
5) Liked individual- ized instruction			2	6.5	3	9.7	20	64.5	6	19.4
6) Learned less using this method	8	25.8	12	38.8	4	12.9	4	12.9	3	9.7
7) Increased my ability to think			5	16.1	8	25.8	14	45.1	4	12.9
8) Not any better than other methods	4	12.9	13	42.0	8	25.8	5	16.1	1	3.2
9) Felt isolated and alone	7	22.6	17	54.8	4	12.9	3	9.7		
10) Uncertain about my performance	3	9.7	9	28.7	10	32.2	9	28.7		
11) Learned faster using this method	2	6.5	6	19.4	9	28.7	10	32.2	4	12.9
12) Worked harder using this method			10	32.2	8	25.8	9	28.7	4	12.9

Table 7

A Comparison of the Percentages of an Attitude Questionnaire Relating to Individualized  
Instruction in First-Year Bookkeeping Taken at the Beginning and at the End  
of the School Term at Mater Dei High School, 1973-1974

Question	<u>Strongly Disagree</u>		<u>Disagree</u>		<u>Neutral</u>		<u>Agree</u>		<u>Strongly Agree</u>	
	First	Last	First	Last	First	Last	First	Last	First	Last
1) Instruction pre- sented by teacher		3.2	3.2	9.7	28.7	35.5	51.6	38.8	16.1	12.9
2) Like to work on my own	6.5	6.5	25.8	12.9	19.4	22.6	48.4	28.7		28.7
3) Find school very boring	6.5	12.9	12.9	32.2	25.8	32.2	45.1	9.7	9.7	12.9
4) Glad about taking bookkeeping	3.2			6.5	32.2	25.8	45.1	42.0	19.4	25.8
5) Like individual- ized instruction	3.2		12.9	6.5	19.4	9.7	38.8	64.5	25.8	19.4
6) Learn less using this approach	12.9	25.8	42.0	38.8	35.5	12.9	9.7	12.9		9.7
7) Increases my abili- ty to think	6.5		19.4	16.1	32.2	25.8	38.8	45.1	3.2	12.9
8) Not any better than other methods	6.5	12.9	35.5	42.0	38.8	25.8	16.1	16.1	3.2	3.2
9) Feel isolated and alone	9.7	22.6	42.0	54.8	28.7	12.9	16.1	9.7	3.2	
10) Uncertain about my performance	3.2	9.7	28.7	28.7	35.5	32.2	28.7	28.7	3.2	
11) Learn faster using this method	3.2	6.5	25.8	19.4	38.8	28.7	28.7	32.2	3.2	12.9
12) Work harder using this method	6.5		16.1	32.2	38.8	25.8	35.5	28.7	3.2	12.9

Tables 5 and 6 consist of a short synopsis of the statements taken from the questionnaire, the number and percentage of students who strongly disagreed, disagreed, remained neutral, agreed or strongly agreed to the statements listed. Table 7 lists a comparison of tables 5 and 6. It gives a short synopsis of the statements, along with the percentages compiled for the responses for both the beginning and the ending of the school year.

In response to the statement on liking instruction presented by a teacher, 16 students, or 51.6 percent, agreed with the statement at the beginning of the course; and 12 students, or 38.8 percent, were in agreement at the end. There were five students, or 16.1 percent, who strongly agreed with the statement at the beginning; and four students, or 12.9 percent, who strongly agreed with it at the end.

There were no students who were in strong agreement with the statement on liking to work on their own at the beginning of the course. At the end, nine students, or 28.7 percent, strongly agreed with this statement. There were 15 students, or 48.4 percent, who agreed at the beginning; and only nine students, or 28.7 percent, who agreed with this statement at the end.

In response to the statement on finding school boring, 14 students, or 45.1 percent, were in agreement at the beginning. At the end, three students, or 9.7 percent, were in agreement with this statement. There were three students who strongly agreed to this statement at the beginning and four students who responded this way at the end.

At the beginning of the year there were 14 students, or 45.1 percent, who agreed with the statement that they were glad they were taking bookkeeping. There were six students, or 19.4 percent who strongly

agreed with the statement. At the end of the year, there were 13 students, or 42 percent, who agreed with the statement; while eight students, or 25.8 percent, strongly agreed.

In replying to the statement on liking individualized or small-group instruction, there were 12 students, or 38.8 percent, in agreement at the beginning of the course; while eight students, or 25.8 percent, responded in strong agreement to this statement. At the end of the course, 20 students, or 64.5 percent, agreed with the statement; while six students, or 19.4 percent, were in strong agreement with the statement.

In response to the statement on learning less using the individualized approach, in the beginning of the year there were four students, or 12.9 percent, who strongly disagreed; while 13 students, or 42 percent, disagreed. At the end of the year, eight students, or 25.8 percent, replied in strong disagreement; while 12 students, or 38.8 percent, disagreed.

At the beginning of the year there was one student who strongly agreed with the statement on individualization increasing his ability to think; while 12 students, or 38.8 percent, agreed. At the end of the year there were four students, or 12.9 percent, who strongly agreed; while 14 students, or 45.1 percent, agreed.

Two students strongly disagreed at the beginning of the year with the statement that individualization of instruction does not seem any better than any other method used in the past. Eleven students, or 35.5 percent, agreed with it. At the end of the year, four students, or 12.9 percent, strongly disagreed; while 13 students, or 42 percent, disagreed.

At the beginning of the year there were three students, or 9.7 percent, who strongly disagreed to the statement on feeling isolated and alone using this type of instruction. There were 13 students, or 42 percent, who disagreed. At the end of the year there were seven students, or 22.6 percent, who strongly disagreed; while 17 students, or 54.8 percent, disagreed.

There was only one student who strongly agreed in regard to the statement on feeling uncertain about his performance using this type of instruction. There were only nine students, or 28.7 percent, who were in agreement with this statement both at the beginning and at the end.

In response to the statement on learning faster using this type of instruction, one student strongly agreed at the beginning; while nine students, or 28.7 percent, agreed. At the end of the year there were four students, or 12.9 percent, who strongly agreed; while ten students, or 32.2 percent, agreed.

In responding at the beginning of the year to the statement whether this type of instruction will make me want to work harder, 11 students, or 35.5 percent, agreed; while there was only one student who strongly agreed. At the end of the year there were nine students, or 28.7 percent, who agreed; while four students, or 12.9 percent strongly agreed.

### Summary

The learning packets for individualized instruction in bookkeeping were written for use during the 1972-1973 school term. At the completion of this term 25 out of 59 students received A grades. There were seven students who failed the course.

An attitude questionnaire was given to these students both at the beginning and at the end of the course. The results indicated that a large percentage of students like the instruction to be presented by a teacher. There was a greater number of students at the end of the course as compared with the beginning who responded in strong agreement on liking to work on their own and acquiring knowledge on their own. In addition to this, there was a greater number of students who felt like they did learn faster using individualized instruction. The percent of students who liked individualized, small-group instruction at the beginning was 71 percent as compared with 62.7 percent at the end.

After using the learning packets for one year, the necessary revisions were made in preparation for individualizing the instruction for the 1973-1974 school term. At the conclusion of the course, there were four out of 31 students who received A grades. There were no students who failed the course.

The results of the attitude questionnaire given to the students indicated that there were fewer students who liked the instruction presented by the teacher at the end of the course as compared with the beginning. There was an increase from 64.5 percent to 83.9 percent of the students who agreed or strongly agreed with liking individualized, small-group instruction. The percentage of students who were glad they took bookkeeping increased from 64.5 percent to 67.7 percent. There were 58 percent of the students at the end as compared with 42 percent at the beginning who felt like this type of instruction increased their ability to think. There were 54.9 percent of the students at the end as compared with 42 percent at the beginning who thought that this method of instruction was better than other methods used in the past.

## Chapter 4

### THE PRESENTATION OF INDIVIDUALIZED LEARNING PACKETS FOR FIRST-YEAR BOOKKEEPING

The individualized learning packets for use in first-year bookkeeping at Mater Dei High School, Breese, Illinois, were presented for this paper after a few minor revisions were made in the packets. These revisions were based on the information acquired while using these packets for two years. The objectives and post-tests for each packet remained the same.

Each student received an introductory packet at the beginning of the course along with the first packet. The form of instruction was explained and discussed with the students. In order to aid in acquainting the students with the method to be adopted, the first packet was presented to the entire class. After the completion of this packet, each student could progress at his own rate.

STUDENT'S INFORMATION MANUAL

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For  
Individualized Instruction  
of Bookkeeping  
Mater Dei High School  
Breese, Illinois

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by  
Sister Joan Backes

## INTRODUCTORY PACKET FOR BOOKKEEPING I

This introductory packet is an explanation of the procedure to be followed in your study of bookkeeping using individualized instruction. It is provided for you as a reference guide in terms of performance standards, evaluation, and course direction.

This introductory packet includes the following information:

1. The general objectives of bookkeeping.
2. The explanation of the packet format.
3. The packets included in the course.
4. The chapter discussion procedure.
5. The schedule for tests.
6. The evaluation process.
7. The supplies needed for the course.

### The general objectives of bookkeeping

1. The student, when given a bookkeeping business transaction, will be able to write the double entry needed for the transaction and then be able to analyze and explain in writing or orally the given transaction.
2. After studying the accounting cycle in its simplest form, in using the combination journal and subsidiary ledgers, and the special journals, the student will be able to perform the following:
  - a. analyze in writing the use of these various journals in the cycle.
  - b. illustrate and interpret the cycle.
  - c. apply the information to the working of the problems involved in the cycle.
3. The student will be able to apply the knowledge acquired in the study of the accounting cycle to the combination journal, the subsidiary ledgers, the eight-column work sheet, and to the correct completion of the Stereotronics Practice Set using business simulation.

4. After working through the unit on payroll systems, the student will be able to describe in writing the various payroll taxes paid by the employer and employee, illustrate in writing problems on how the payroll is prepared and paid, finally be able to interpret and explain in writing the necessary entries involved with the payroll.
5. After performing the various activities and reading the material available for the student on taxation, the student will be able to describe in writing the use of taxation in our society and be able to apply this knowledge to filing income tax returns.
6. The student will be able to recognize and explain the relationship of bookkeeping to modern data processing techniques and also acquire a knowledge of the three data processing systems presented in this course and then be able to illustrate and explain these three systems in writing.
7. Throughout the course the student, when given specific bookkeeping terms, will be able to explain in writing an understanding of bookkeeping concepts and business terminology.
8. At the completion of this bookkeeping course, the student will be able to apply all the bookkeeping knowledge acquired from the course to the correct completion of the Campers' Cove business simulation practice set.
9. Throughout the course you will be encouraged to explore your interest in the aptitude for the fields of accounting or data processing.
10. During the duration of this class you will develop skills and concepts which will be useful to you regardless of specific job requirements.
11. At all times, you will be aided toward inculcating qualities of honesty, responsibility and cooperation toward both employer and co-workers.

#### The explanation of the packet format

1. The primary idea states the main concept to be studied in the packet.
2. The secondary ideas list the specific areas covered in the packet.
3. The rationale is given to help you realize the importance of the one packet in relation to the entire course.
4. The objectives stated within a given packet mention specifically the desired outcomes of learning and the desired performance level.
5. The required activities that are outlined in the packet list what you must complete in order to aid you in performing the objectives with the degree of competency stated. Any problems that are not listed but do appear in your textbook are optional activities. You are to

do these optional activities if you do not fully understand the information in the chapters. For your own information there are review problems at the end of the textbook for your further study of a specific area on which you need additional work.

6. The purpose of the self-tests which you must take after completing the required activities is to measure whether or not you have met the performance objectives for the activities. These tests are to be self-administered and evaluated. Upon completing the self-test satisfactorily, you are to begin the next required activity. If you are unable to complete this self-test with the minimum performance criteria, see your instructor for remedial practices.
7. You are to take the post-tests after you have completed all the self-tests and the required activities. Refer to the specific objectives stated in the packet in order to know specifically what will be tested in each specific post-test.

#### The packets included in the course .

The following is a list of the packets for this bookkeeping course.

#### PACKET 1 -- The Accounting Cycle in its Simplest Form

- Chapter 1 - Starting an accounting system
- Chapter 2 - Recording the opening entry
- Chapter 3 - Posting the opening entry
- Chapter 4 - Debit and credit of business transactions affecting balance sheet accounts
- Chapter 5 - Debit and credit of income and expense transactions
- Chapter 6 - Journalizing business transactions

#### PACKET 2 -- A Continuation of the Accounting Cycle in its Simplest Form

- Chapter 7 - Posting
- Chapter 8 - Proving the accuracy of posting
- Chapter 9 - The six-column work sheet
- Chapter 10- The income statement and the balance sheet
- Chapter 11- Closing the ledger
- Project 1 - Journalizing, posting, and taking a trial balance
- Project 2 - The complete accounting cycle

#### PACKET 3 -- The Accounting Cycle with the Combination Journal and the Subsidiary Ledger

- Chapter 12 - Journalizing transactions of a merchandising business
- Chapter 13 - Posting to ledgers of a merchandising business
- Chapter 14 - The checking account and reconciliation of bank statements
- Chapter 15 - Eight-column work sheet with adjustments
- Chapter 16 - Financial statements for a merchandising business
- Chapter 17 - Adjusting and closing entries for a merchandising business

PACKET 4

Stereotronics Practice Set -- a business simulation

PACKET 5 -- Payroll Systems

Chapter 18 - Payroll records

Chapter 19 - Payroll accounts, taxes, and reports

PACKET 6 -- The Accounting Cycle using Special Journals

Chapter 23 - Special journals: purchases and cash payments;  
four-column general journal

Chapter 24 - Special journals: sales and cash receipts

Project 3 - The Accounting cycle using special journals

Chapter 25 - A cash register system and petty cash

PACKET 7 -- Accounting for Sales Tax, Bad Debts, and Depreciation

Chapter 26 - Sales tax and other sales and purchases systems

Chapter 27 - Bad debts and valuation of accounts receivable

Chapter 28 - Fixed assets and depreciation

Chapter 29 - Disposing of fixed assets

PACKET 8 -- Campers' Cove Practice Set -- a business simulation

(Counts for three packets)

PACKET 9 -- An Introduction to Automated Data Processing

Chapter 20 - Data Processing systems: manual and mechanical

Chapter 21 - Data Processing systems: unit record

Chapter 22 - Data Processing systems: electronic computer

PACKET 10 -- Accounting for Notes, Accrued Income, and Accrued Expenses

Chapter 30 - Notes and interest

Chapter 31 - Accrued income and accrued expenses

PACKET 11 -- Partnerships and Corporations

Chapter 32 - Partnerships

Chapter 33 - Corporations

PACKET 12 -- Taxation

Booklet -- Understanding Taxes from the Federal Government

The chapter discussion procedure

Discussions on the various chapters will be held during class periods. Just put what chapter you are ready to have discussed on the paper on the teacher's desk along with your name the day before you are ready for it. The teacher in turn will put on the blackboard the order in which these chapters will be discussed along with the times for beginning them. Take care of any individual problems you might be having with your bookkeeping before or after chapter discussions.

### The schedule for tests

Tests will be given on all days except on Monday. Ask for these tests at the beginning of the class period.

### The evaluation process

At the completion of a packet, grades will be given based on the following aspects:

1. A grade for the unit test will be given. Upon the completion of a packet, unit tests must be taken and passed with the degree of accuracy stated in the specific objective before proceeding to the next packet. If you ever have to retake a unit test, the grade given will consist of the average of the two tests.
2. A grade will be given for the problem test. If you ever have to retake a problem test, the grade given will consist of the average of the two tests.
3. One grade will be given for the following:
  - a) Short quizzes or tests on individual chapters given within the packet.
  - b) Problems completed in each packet.
4. A grade will be given for any project within the packet.
5. At the end of each packet you are required to discuss your final grade received on the packet with your teacher. At this time you must also discuss your individual progress in the course.

The two semester grades which are your important grades for the records and for your grade point average will be based on both the grades received on your packet work plus your progress in the course.

1. At the end of the first semester your grade on progress will be based on the following:
  - A -- The completion of the first 3 packets with packet 4 near completion.
  - B -- The completion of the first 3 packets with packet 4 started.
  - C -- The completion of the first 3 packets.
  - D -- The completion of the first 2 packets with packet 3 started.
2. At the end of the second semester your grade on progress will be based on the following:
  - A -- You must complete packets 1 through 8.  
You must complete 1 of the other 4 packets.
  - B -- You must complete packets 1 through 7.  
You must complete 2 of the other 5 packets.  
(This could include packet 8 which counts for 3 packets.)

- C -- You must complete packets 1 through 7 (or a total of 7 packets).
- D -- You must complete packets 1 through 6 (or a total of 6 packets).

The supplies needed for the course

1. Textbook: Century 21 Accounting, Boynton, Swanson, Carlson, and Forkner, 1972.
2. Workbooks for the above textbook.
3. Business Simulations: Stereotronics Business Simulation Set.
4. Campers' Cove Business Simulation Set. (Optional)

## BOOKKEEPING I

## PACKET 1

PRIMARY IDEA: The Accounting Cycle in its Simplest Form

- SECONDARY IDEAS:
1. Starting an accounting system
  2. Recording the opening entry
  3. Posting the opening entry
  4. Debit and credit of business transactions affecting balance sheet accounts
  5. Debit and credit of income and expense transactions
  6. Journalizing business transactions

RATIONALE: In this first packet you will begin working with the fundamentals of bookkeeping. The information acquired in this packet will be applied to all of the chapters covered in this course.

OBJECTIVES FOR CHAPTERS 1 THROUGH 6

1. At the completion of the required activities in Chapter 2 the student must be able to perform the following with 90% accuracy:
  - a. When given a list of assets and a list of liabilities along with the name of the business and the date, the student must prepare in writing the balance sheet in correct form and then;
  - b. From the balance sheet, the student must post the opening entry to the journal.
2. At the completion of the required activities in Chapter 5, the student must explain orally to the teacher with 100% accuracy the following:
  - a. When given an account name the student must be able to classify rapidly the account as an asset, liability, capital, income or expense.
  - b. When given a business transaction, the student must be able to analyze each transaction by giving the accounts to be debited and the one to be credited.
3. At the completion of all the required activities in the packet the student must be able to pass an objective test with 70% accuracy on the following material taken from Chapters 1 through 6:
  - a. Choose from a random list of accounting terms the correct meaning of these terms.
  - b. Classify accounts by identifying them as assets, liabilities, capital, income or expenses.

- c. When given a statement on different debit and credit principles, you must be able to indicate which word, debit or credit, would complete the statement correctly.
  - d. When given a transaction for a cash journal, you must be able to indicate what account is debited and credited, and in what column of the journal the transaction is recorded.
  - e. When given an accounting principle, you must be able to analyze these principles by indicating a yes or no answer for the principle.
  - f. When given different statements pertaining to the accounts, you must be able to indicate the increase and decrease side, the balance side of the asset, liability, capital, income, or expense accounts.
4. At the completion of all the required activities in the packet the student must be able to complete in writing the following problems with at least 80% accuracy:
- a. The preparation of a balance sheet taken from a list of given accounts along with the name of the business and the date.
  - b. From the correct source document you must record the opening entry in the journal and then post this entry to the ledger.
  - c. When given cash transactions you must be able to journalize these transactions in a cash journal and then be able to prove the accuracy of your journalizing.

### REQUIRED ACTIVITIES AND EVALUATION

At the completion of the work in a packet hand in your required activities stapled together in the order assigned. These should be checked by you and then corrected by you if necessary before you hand them in. If you do any optional activities, hand them in along with the required activities.

### Chapter 1 -- Starting an Accounting System

1. Read Chapter 1 (You are encouraged to read each chapter before attending the chapter explanation.)
2. Attend an explanation on Chapter 1 (If you are able to stay ahead of your teacher during the presentation of this first packet, you may be excused from these explanations.)
3. Drill 1-D1, D2, D3 -- Pages 13 and 14
4. Problem 1-1 -- Page 14
5. Bonus Problem -- Page 16
6. Prepare a personal balance sheet of your own assets, liabilities, and net worth. This will be graded on the accuracy of the form.

Self-Test -- Work Study Guide 1 and then check your answers. In checking all your study guides use the programmed answer sheet provided for you.

## Chapter 2 -- Recording the Opening Entry

1. Read Chapter 2
2. Attend a lecture on Chapter 2
3. Drill 2-D1 -- Page 24
4. Problem 2-1 -- Page 25
5. Problem 2-B -- Page 27

Self-Test -- Work the Study Guide for Chapter 2  
Work problem 2-R1 -- Page 699

Post-Test -- Refer to Objective 1 for the explanation of this test.  
Take the Test on Chapters 1 and 2.

## Chapter 3 -- Posting the Opening Entry

1. Read Chapter 3
2. Attend a lecture on Chapter 3
3. Drills 3-D1, D2 -- Pages 40 and 41
4. Problem 3-1 -- Page 41
5. Problem 3-B -- Page 43

Self-Test -- Work the Study Guide for Chapter 3

## Chapter 4 -- Debit and Credit of Business Transactions

1. Read Chapter 4
2. Attend a lecture on Chapter 4
3. Drills 4-D1, D2, D3, D4 -- Pages 54 - 56
4. Problem 4-1 -- Page 57
5. Problem 4-B -- Page 60

Self-Test -- Work the Study Guide for Chapter 4

## Chapter 5 -- Debit and Credit of Income and Expense Transactions

1. Read Chapter 5
2. Attend a lecture on Chapter 5
3. Drills 5-D1, D2, D3 -- Pages 69 - 70
4. Problem 5-1 -- Page 70

Self-Test -- Work the Study Guide for Chapter 5  
Work Problem 5-2 -- Page 71

Post-Test -- Refer to Objective 2 for what is expected of you on this test.  
Take an oral test on Chapter 5.

Chapter 6 -- Journalizing Business Transactions

1. Read Chapter 6
2. Attend a lecture on Chapter 6
3. Drill 6-D1, D2, -- Page 91-92
4. Problem 6-2 -- Page 94

Self-Test -- Work Study Guide 6

Work Problem 6-1 without the use of your book.

Post-Tests on the Entire Packet

1. Objective Test -- Refer to Objective 3 for what you need to know for this test. Take the test.
2. Problem Test -- Refer to Objective 4 of packet 1 for what you need to know for this test. Take the test.

## BOOKKEEPING I

## PACKET 2

PRIMARY IDEA: A Continuation of the Accounting Cycle in its Simplest Form

SECONDARY IDEAS:

1. Posting
2. Proving the accuracy of posting
3. The six-column work sheet
4. The income statement and the balance sheet
5. Closing the ledger

RATIONALE: In working through the material in this packet you will conclude your study on the accounting cycle in its simplest form. At the completion of this packet, you should be able to follow the general procedure for completing the accounting cycle.

OBJECTIVES FOR CHAPTERS 7 THROUGH 11

1. After the completion of Project 1, you must be able to respond orally with answers to any questions asked by the teacher on the work performed in the project.
2. At the completion of the required activities in Chapter 9, the student when given the name of the business, the date, a list of accounts along with the account balances, must complete the work sheet with 100% accuracy.
3. At the completion of the required activities in Chapter 11, when given the necessary information for the income and expense accounts, the student must be able to close these accounts using the Income and Expense Summary account with 100% accuracy.
4. After the completion of Project 2, in a group of three to five students you must be able to respond orally with answers to any questions asked by the teacher on the work performed in the project.
5. At the completion of all the required activities in the packet, the student must be able to pass an objective test with 70% accuracy on the following information:
  - a. When given a blank trial balance, along with the items to be located on this trial balance, the student must be able to indicate the correct location of these items on the trial balance.
  - b. When given a list of accounts, the student must be able to indicate if these accounts have a debit or a credit balance in the trial balance.

- c. When given a list of accounts, the student must be able to indicate with a check mark how these accounts are extended to the income statement and the balance sheet columns of the work sheet.
  - d. When given a blank balance sheet form and the different information that is recorded on this form, the student will be able to locate where each of these items are to be written on the balance sheet.
  - e. When given a random list of accounting terminology, along with definitions for these terms, the student will be able to select the correct definition for the correct accounting term.
  - f. When given the account titles and the information for closing the entries at the end of the fiscal period, the student will be able to choose the correct account titles for closing the ledger accounts.
  - g. When given statements pertaining to the examining of accounts, posting, financial statements, and closing entries, the student will be able to choose the correct answer from several options given.
6. At the completion of the required activities in Packet 2, the student will be able to complete the following problem test with 80% accuracy:
- a. When given ledger accounts and their balances, the student will be able to prepare a work sheet using the form given.
  - b. In completing the work sheet, the student will be able to prepare the financial reports for the business, namely the income statement and the balance sheet.
  - c. From the information given in the work sheet, the student will be able to record the closing entries in a general journal form provided.
  - d. From the entries recorded in the general journal, the student will be able to post the closing entries to the ledger accounts.

## REQUIRED ACTIVITIES AND EVALUATION

### Chapter 7 -- Posting

1. Read Chapter 7
2. Attend an explanation on Chapter 7
3. Drills 7-D1, D2, D3 -- Pages 114 - 115
4. Problem 7-1 -- Page 115

### Self-Test -- Work Study Guide 7

### Chapter 8 -- Proving the Accuracy of Posting

1. Read Chapter 8

2. Attend an explanation on Chapter 8
3. Drills 8-D1, 2 -- Pages 130-131
4. Problem 8-1 -- Page 132
5. Problem 8-2 -- Page 132

Self-Test -- Work Study Guide 8

Project 1 -- Journalizing, Posting, and Taking a Trial Balance

1. Work project 1 -- work on neatness and accuracy in your work.
2. In preparation for your oral discussion on this project you should be able to answer the following questions:
  - a. How do you open accounts in the ledger?
  - b. What is an opening entry?
  - c. What is the source document used for the opening entry?
  - d. Be able to state the debit and credit part to any transaction in the project.
  - e. How do you prove the cash journal?
  - f. What is the trial balance and how do you prepare it?
3. Have an oral discussion on this project with your teacher. Your grade on the project will be based on your discussion as well as the work completed on the project.

Chapter 9 -- The Six-column Work Sheet

1. Read Chapter 9
2. Attend an explanation on Chapter 9
3. Drills 9-D1, 2 -- Page 143-144
4. Problem 9-1 -- Page 144 (Use this problem for 10-1)
5. Problem 9-B -- Page 146

Self-Test -- Work Study Guide 9  
Work 9-M on page 145 without using your book

Post-Test -- Refer to Objective 1 for an explanation of this test.  
Take the test on Chapter 9.

Chapter 10 -- The Income Statement and the Balance Sheet

1. Read Chapter 10
2. Attend an explanation on Chapter 10
3. Drills D-1, 2 -- Pages 154-155
4. Problem 10-1 -- Page 156

Self-Test -- Work Study Guide 10

Chapter 11 -- Closing the Ledger

1. Read Chapter 11

2. Attend an explanation on Chapter 11
3. Drills 11-D1, 2 -- Pages 175-176
4. Problem 11-1 -- Page 176

Self-Test -- Work Study Guide 11  
Work the enclosed self-test for Chapter 11

Post-Test -- Refer to Objective 2 for what is expected of you in this test. Take the test on Chapter 11.

Project 2 -- The Complete Accounting Cycle

1. Work Project 2 -- strive for neatness and accuracy in your work.
2. In preparation for your oral discussion on this project you should be able to answer the following questions:
  - a. What are the different steps followed in the complete accounting cycle?
  - b. What accounts would be debited or credited in any business transaction given in the project?
  - c. What is the use of the post reference column in the cash journal?
  - d. What is the procedure followed when posting totals?
  - e. What columns are posted as totals? individually? Why?
  - f. What ledger accounts are closed at the end of the fiscal period and what procedure is used in closing these accounts?
  - g. What is the post-closing trial balance and why do you prepare it?
3. Prepare a chart or a diagram displaying and explaining the bookkeeping cycle.
4. Have a group discussion on this project with your teacher. Your grade on the project will be based on your discussion as well as the work completed on the project.

Post-Tests on the Entire Packet

1. Objective Test -- Refer to Objective 5 for what you need to know for the test. Take the test.
2. Problem Test -- Refer to Objective 6 for what you need to know for the test. Take the test.

SELF-TEST FOR CHAPTER 11

Directions: Close the following income and expense accounts into the capital account.

1. Salary Expense  
165.00 |

Howard Hall, Capital  
| 1789.00

Laundry Expense  
150.00 |

Income and Expense Summary  
|

Miscellaneous Expense  
50.00 |

Room Sales  
| 1120.00

Rent Expense  
500.00 |

2. Advertising Expense  
350.00 |

Steve Jones, Capital  
| 2300.00

Laundry Expense  
100.00 |

Income and Expense Summary  
|

Rent Expense  
300.00 |

Room Sales  
| 900.00

Salary Expense  
500.00 |

## BOOKKEEPING I

## PACKET 3

PRIMARY IDEA: The Accounting Cycle with the Combination Journal and Subsidiary Ledgers

SECONDARY IDEAS:

1. Journalizing transactions of a merchandising business
2. Posting to ledgers of a merchandising business
3. The checking account and reconciliation of bank statements
4. Eight-column work sheet with adjustments
5. Financial statements for a merchandising business
6. Adjusting and closing entries for a merchandising business

RATIONALE: In the study of the material in this packet you will again be covering the complete accounting cycle using a 10-column combination journal, three ledgers, and an eight-column work sheet all for a merchandising business.

OBJECTIVES FOR CHAPTERS 12 THROUGH 17

1. At the completion of the required activities in Chapter 12, the student when given the transactions for a merchandising business must record with 80% accuracy these transactions in a combination journal which will be provided. Also, the student must be able to foot, prove, total and rule this combination journal.
2. At the completion of the required activities in Chapter 14, the student must prepare in writing a reconciliation of a bank statement with 100% accuracy. The balances, the outstanding deposits, and outstanding checks will be given.
3. At the completion of the required activities in Chapter 15, the student when given the account titles, account balances, along with the adjustments for the fiscal period, must complete a work sheet with 100% accuracy.
4. At the completion of the required activities in Chapter 17, the student when given a completed work sheet must record in a journal provided, the adjusting and the closing entries with 100% accuracy.
5. At the completion of the required activities in the packet, the student must be able to pass an objective test with 70% accuracy on the following information:

- a. When given a list of account titles the student must be able to identify these accounts as an asset, liability, capital, income, cost of merchandise, or an expense account.
- b. When given transactions for recording adjusting and closing entries along with the account titles, the student must be able to debit and credit the correct accounts.
- c. When given a random list of accounting terminology along with definitions for these terms, the student must be able to select the correct term for the given statement.
- d. When given various statements on examining ledgers, financial statements, and inventories, the student must be able to identify the statement as true or false.

### REQUIRED ACTIVITIES AND EVALUATION

#### Chapter 12 -- Journalizing Transactions of a Merchandising Business

1. Read Chapter 12
2. Attend an explanation on Chapter 12
3. Drill 12-D1 -- Page 206
4. Problem 12-1 -- Page 207

Self-Test -- Work Study Guide 12  
Work Problem 12-M -- Page 208

Post-Test -- Refer to Objective 1 of this packet for an explanation of this test and then take a test on Chapter 12.

#### Chapter 13 -- Posting to Ledgers of a Merchandising Business

1. Read Chapter 13
2. Attend an explanation on Chapter 13
3. Drill 13-D1 -- Page 235
4. Drill 13-D2 -- Page 236
5. Problem 13-1 -- Page 236

Self-Test -- Work Study Guide 13

#### Chapter 14 -- The Checking Account and Reconciliation of Bank Statements

1. Read Chapter 14
2. Attend an explanation on Chapter 14
3. Drills 14-D1, 2, 3 -- Pages 254-255
4. Problems 14-1, 2, 3 -- Pages 255-256

Self-Test -- Work Study Guide 14  
Work Problem 14-R -- Page 710

Post-Test -- Refer to Objective 2 of this packet for an explanation of this test and then take a test on Chapter 14.

Chapter 15 -- Eight-column Work Sheet with Adjustments

1. Read Chapter 15
2. Attend an explanation on Chapter 15
3. Drills 15-D1, 2, 3 -- Pages 288-289
4. Problem 15-1 -- Page 290 (Check this problem and then keep it for 16-1)

Self-Tests -- Work Study Guide 15  
 Work Problem 15-M -- Page 291

Post-Test -- Refer to Objective 3 of this packet for an explanation of this test and then take the test on the eight-column work sheet.

Chapter 16 -- Financial Statements for a Merchandising Business

1. Read Chapter 16
2. Attend an explanation on Chapter 16
3. Drills 16-D1, 2, 3 -- Pages 308-309
4. Problem 16-1 -- Page 310

Self-Test -- Work Study Guide 16

Chapter 17 -- Adjusting and Closing Entries for a Merchandising Business

1. Read Chapter 17
2. Attend an explanation on Chapter 17
3. Drills 17-D1, 2, 3 -- Pages 330-331
4. Problem 17-1 -- Page 332

Self-Tests -- Work Study Guide 17  
 In using the work sheet on page 312 of your textbook, record the adjusting and closing entries. The answer keys are on pages 319 and 324 of your textbook.

Post-Test -- Refer to Objective 4 of this packet for an explanation of the test you must take after completing chapter 17. Take the test.

Post-Test on the Entire Packet

Objective Test -- Refer to Objective 5 of this packet for an explanation on the information you need to know for this test. Take the test.

## BOOKKEEPING I

### PACKET 4

PRIMARY IDEA: Accounting work for a month for a business --  
STEREOTRONICS

SECONDARY IDEAS:

1. Recording transactions in a journal
2. Posting these transactions
3. Preparing a trial balance
4. Performing the work at the end of the fiscal period

RATIONALE: In the completion of the three previous packets you obtained the many skills needed to work through an entire fiscal period for a business. In this packet you must combine these skills in keeping books for a business for one month.

### OBJECTIVES FOR STEREOTRONICS

1. In working through the practice set you must be able to complete the entire set with the aid of your textbook and your teacher within a period of three weeks.
2. After you complete the entire set, you must be able to orally discuss with your teacher any phase of work that you performed on the practice set.
3. At the completion of the practice set you must pass with 70% accuracy a test consisting of 100 questions. The test is based on questions taken directly from the Stereotronics Set which you must use in completing the test.

### REQUIRED ACTIVITY AND EVALUATION

1. Work the entire practice set using your textbook as a guide when needed.

Post-Tests

1. Take a test on the Practice Set
2. Hand in the Practice Set and be prepared to talk with your teacher on any phase of the set that is asked you.

GRADING FOR THE PRACTICE SET -- will be based on the following three areas:

1. A grade on the entire set based on neatness, completion, accuracy of the financial reports prepared, etc.

2. A grade on the 100 point test given on the set.
3. A grade for the amount of time it takes you to complete the entire set. (You must have the beginning date on your set okeyed by your teacher and then have the date of completion okeyed by me also.)

## BOOKKEEPING I

## PACKET 5

PRIMARY IDEA: The study of payroll records, keeping payroll accounts, taxes and reports

SECONDARY IDEAS:

1. Payroll taxes
2. Preparing the payroll
3. Paying the payroll
4. Recording the payroll in the combination journal
5. Recording the employer's payroll taxes in the combination journal
6. Paying the withholding taxes and the payroll taxes
7. Payroll tax records

RATIONALE: In the study of the material in this packet you will cover some of the basic payroll work performed by accounting clerks or payroll clerks using some of the most common payroll forms and records. In addition to this, you will be studying entries, records, and reports necessary when recording and paying payrolls.

OBJECTIVES FOR CHAPTERS 18 AND 19

1. At the completion of the required activities in Chapter 19, the student when given payroll transactions must be able to record these transactions in a journal with 80% accuracy.
2. At the completion of the required activities in Chapter 19, the student must be able to pass an objective test with 70% accuracy on the following information:
  - a. When given a random list of accounting terminology you must be able to match these terms with the correct statement to complete the matching.
  - b. When given a business transaction for recording the various payroll transactions, the employees' taxes, and the employer's payroll taxes, the student must be able to give the account to be debited and the account to be credited.

REQUIRED ACTIVITIES AND EVALUATIONChapter 18 -- Payroll Records

1. Read Chapter 18
2. Attend an explanation on Chapter 18

3. Problem 18-1 -- Page 358
4. Problem 18-2 -- Page 359
5. Problem 18-3 -- Page 359
6. Problem 18-4 -- Page 360

Self-Test -- Work Study Guide 18

Chapter 19 -- Payroll Accounts, Taxes, and Reports

1. Read Chapter 19
2. Attend an explanation on Chapter 19
3. Problem 19-1 -- Page 378
4. Problem 19-2 -- Page 378

Self-Test -- Work Study Guide 19  
Work Problem 19-M -- Page 379

Post-Tests on the Entire Packet

1. Objective Test -- Refer to Objective 2 for what you need to know for the test. Take the test.
2. Problem Test -- Refer to Objective 1 for what you need to know for the test. Take the test.

## BOOKKEEPING I

## PACKET 6

PRIMARY IDEA: The Accounting Cycle Using Special Journals

SECONDARY IDEAS:

1. Special journals: purchases and cash payments; four-column general journal
2. Special journals: sales and cash receipts
3. The accounting cycle using special journals
4. A cash register system and petty cash

RATIONALE: There are many businesses not large enough to afford automated data processing equipment, yet having so many transactions that it is not feasible to record them all in a combination journal. Such businesses use one or more special journals in their data processing systems. In this part of your study of bookkeeping, five books of original entry are used: purchases journal, sales journal, cash receipts journal, cash payments journal, and a four-column general journal.

OBJECTIVES FOR CHAPTERS 23 THROUGH 25

1. When given the information for establishing, proving and replenishing the petty cash fund, the student must be able to complete with 100% accuracy the journal entries for these transactions.
2. When given the information for completing Project 3, the student must complete the project satisfactorily and must be able to orally discuss the transactions and the use of the special journals with the instructor.
3. At the completion of the required activities in the packet, the student must be able to complete the following problem test with 80% accuracy:
  - a. When given business transactions the student must determine in which journal it is to be recorded and then record the transaction in the correct journal.
  - b. At the completion of the transactions, the student must rule and prove the five different journals.
4. At the completion of the required activities in the packet, the student must be able to pass an objective test with 70% accuracy on the following information:
  - a. When given a random list of accounting terminology along with definitions for these terms, the student must be able to select the correct definition for the correct accounting term.

- b. When given a list of accounts along with the transactions, the student must be able to correctly indicate the journal for each transaction and which accounts are to be debited and credited.
- c. When given statements pertaining to examining the cash register system, petty cash, and special journals, the student must be able to indicate either a yes or no answer to the statement.

### REQUIRED ACTIVITIES AND EVALUATION

#### Chapter 23 -- Special Journals: Purchases and Cash Payments; Four-Column General Journal

1. Read Chapter 23
2. Attend an explanation on Chapter 23
3. Drills 23-D1, D2 -- Page 473
4. Problem 23-1 -- Page 474

Self-Test -- Work Study Guide 23

#### Chapter 24 -- Special Journals: Sales and Cash Receipts

1. Read Chapter 24
2. Attend an explanation on Chapter 24
3. Drills 24-D1, D2 -- Page 500
4. Problem 24-1 -- Page 501
5. Problem 24-2 -- Page 504

Self-Test -- Work Study Guide 24

#### Project 3 -- The Accounting Cycle Using Special Journals

1. Work Project 3 -- strive for neatness and accuracy in your work.
2. In preparation for your oral discussion on this project be sure that you are able to answer the following questions:
  - a. What is the entry for any transaction taken from the project.
  - b. Be able to state what journal the transaction would be recorded.
3. Have an oral discussion on this project with your teacher. Your grade on the project will be based on your discussion as well as the work completed in the project.

#### Chapter 25 -- A Cash Register System and Petty Cash

1. Read Chapter 25
2. Attend an explanation on Chapter 25
3. Drill 25-D1 -- Page 536
4. Problem 25-1 -- Page 536

5. Problem 25-2 -- Page 537

Self-Test -- Work Study Guide 25  
Work Problem 25-R2 -- Page 727

Post-Test -- Refer to Objective 1 of this packet for an explanation of what you need to know for the test. Take the test.

Post-Tests on the Entire Packet

1. Objective Test -- Refer to Objective 4 for what you need to know for the test. Take the test.
2. Problem Test -- Refer to Objective 3 for what you need to know for the test. Take the test.

## BOOKKEEPING I

## PACKET 7

PRIMARY IDEA: Accounting for Sales Tax, Bad Debts, and Depreciation

SECONDARY IDEAS:

1. Sales tax and other sales and purchases systems
2. Bad debts and valuation of accounts receivable
3. Fixed assets and depreciation
4. Disposing of fixed assets

RATIONALE: In working through another phase of bookkeeping in this packet, you will begin the study of additional transactions related to keeping the bookkeeping records for a business.

OBJECTIVES FOR CHAPTERS 26 THROUGH 29

1. At the completion of the required activities in Chapter 26 you must be able to pass with 80% accuracy a written test on the transactions explained and studied in this chapter.
2. At the completion of the required activities in Chapter 27 you must be able to pass with 80% accuracy a written test on the transactions explained in this chapter.
3. At the completion of the required activities in Chapter 29 you must be able to pass with 80% accuracy a test on the entries explained in this chapter.
4. At the completion of the required activities in the packet you must pass an objective test with 70% accuracy on the following information:
  - a. When given a business transaction along with a list of account titles and the different journals, you must be able to correctly indicate for each transaction stated: 1) the journal in which the transaction should be recorded; 2) the accounts to be debited and credited.
  - b. When given a random list of accounting terminology along with definitions for these terms, you must be able to select the correct accounting term for the definition given.
  - c. When given the account titles which are to appear in the work sheet, you must be able to correctly extend these accounts into the income statement columns and the balance sheet columns of the work sheet.
  - d. When given questions relating to examining sales taxes, accounts receivable and depreciation, you must be able to answer the questions correctly with a yes or a no.

REQUIRED ACTIVITIES AND EVALUATIONChapter 26 -- Sales Tax and other Sales and Purchases Systems

1. Read Chapter 26
2. Attend an explanation on Chapter 26
3. Drill 26-D1 -- Page 555
4. Problem 26-1 -- Page 556
5. Problem 26-2 -- Page 557

Self-Test -- Work Study Guide 26  
Work Problem 26-M -- Page 558

Post-Test -- Refer to Objective 1 of this packet for an explanation of what you need to know for the test. Take the test.

Chapter 27 -- Bad Debts and Valuation of Accounts Receivable

1. Read Chapter 27
2. Attend an explanation on Chapter 27
3. Drill 27-D1 -- Page 573
4. Problem 27-1 -- Page 573

Self-Test -- Work Study Guide 27  
Work Problem 27-M -- Page 575

Post-Test -- Refer to Objective 2 of this packet for an explanation of what you need to know for the test. Take the test.

Chapter 28 -- Fixed Assets and Depreciation

1. Read Chapter 28
2. Attend an explanation on Chapter 28
3. Drill 28-D1, D2 -- Page 592
4. Problem 28-1 -- Page 592
5. Problem 28-2 -- Page 593

Self-Test -- Work Study Guide 28

Chapter 29 -- Disposing of Fixed Assets

1. Read Chapter 29
2. Attend an explanation on Chapter 29
3. Drills 29-D1, D2 -- Page 607
4. Problem 29-1 -- Page 607
5. Problem 29-2 -- Page 608 (Work only number one of the instruction)

Self-Test -- Work Study Guide 29  
Work Problem 29-M -- Page 609

Post-Test -- Refer to Objective 3 of this packet for an explanation of what you need to know for the test. Take the test.

Post-Test on the Entire Packet

Objective Test -- Refer to Objective 4 for what you need to know for the test. Take the test.

## BOOKKEEPING I

## PACKET 8

PRIMARY IDEA: Accounting work for two months for a single proprietorship retail store. It uses a cash register system and special journals.

RATIONALE: This practice set will provide some experience for you in keeping records for a retail business. Up to this point you have been studying sections needed for keeping these records. Now you will be combining your skills in completing the work for a two-month period.

OBJECTIVES FOR CAMPERS' COVE

1. In working through the practice set the student must be able to analyze each transaction and record correctly these transactions in the journals.
2. At the end of each month the student must be able to complete without error all the work required at the end of each month.
3. At the completion of the practice set the student must pass with 70% accuracy a test consisting of 50 questions. The test is based on the Campers' Cove Practice Set which you must use to complete the test.
4. At the completion of the practice set the student must be able to explain orally to the teacher any questions asked on the flow of the accounting cycle.

REQUIRED ACTIVITIES AND EVALUATION

1. Work the entire practice set using your textbook as a guide when needed.
2. From your completed work on the practice set, prepare a flow chart for Campers' Cove Accounting Cycle. In doing this refer to pages 612-613 of your textbook.

Post-Tests

1. Take a test on the Practice Set.
2. Hand in the practice set and be prepared to discuss with your teacher questions relating to the accounting cycle.

GRADING FOR THE PRACTICE SET -- will be based on the following three areas:

1. A grade on the 50 point test given on the set.
2. A grade on the entire set based on neatness, completion, accuracy of the financial reports prepared, etc.
3. A grade on the oral discussion you must have with your teacher.

## BOOKKEEPING I

## PACKET 9

PRIMARY IDEA: An introduction to automated data processing

SECONDARY IDEAS:

1. Data Processing Systems: manual and mechanical
2. Data Processing Systems: unit record
3. Data Processing Systems: electronic computer

RATIONALE: This packet is designed to help acquaint you with the use of data processing in the business world.

OBJECTIVES FOR CHAPTERS 20 THROUGH 22

1. When given the five basic steps in the unit record system, the student must be able to arrange them in their proper order.
2. At the completion of the packet the student must be able to pass an objective test with 70% accuracy on the following material taken from chapters 20 through 22:
  - a. When given a random list of accounting terminology along with definitions for these terms, the student will be able to select the correct definition for the correct accounting term.
  - b. When given statements examining data processing systems, the student must be able to indicate either a true or false answer to the statements.
  - c. When given definitions relating to the data processing system, the student must be able to complete these definitions with the correct terms.

REQUIRED ACTIVITIES AND EVALUATION

Chapter 20 -- Data Processing Systems: Manual and Mechanical

1. View the filmstrip on Office Machines available in the library.
2. Read Chapter 20
3. Attend an explanation on Chapter 20
4. Problem 20-1 -- Page 401
5. Problem 20-2 -- Page 401

Self-Test -- Work Study Guide 20

Chapter 21 -- Data Processing Systems: Unit Record

1. Read Chapter 21
2. Attend an explanation on Chapter 21
3. Problem 21-1 -- Page 421
4. Problem 21-2 -- Page 422
5. Problem 21-3 -- Page 423

Self-Test -- Work Study Guide 21

Post-Test -- Refer to Objective 1 for what you need to know for the test. Take the test.

Chapter 22 -- Data Processing Systems: Electronic Computer

1. Work two decision tables -- Obtain these from your teacher
2. Read Chapter 22
3. Attend an explanation on Chapter 22
4. Problem 22-1 -- Page 448
5. Problem 22-2 -- Page 449

Self-Test -- Work Study Guide 22

Post-Test on the Entire Packet

Objective Test -- Refer to Objective 2 of this packet for what you need to know for the test. Take the test.

## BOOKKEEPING I

## PACKET 10

PRIMARY IDEA: Accounting for notes, accrued income, and accrued expenses

SECONDARY IDEAS: 1. Notes and interest  
2. Accrued income and accrued expenses

RATIONALE: In this packet the study of bookkeeping introduces you to the use of promissory notes and how interest on notes is derived from interest tables and computed. In addition to this, the study of entries for recording transactions will be covered.

OBJECTIVES FOR CHAPTERS 30 AND 31

1. At the completion of the packet you must pass an objective test with 70% accuracy on the following information:
  - a. When given a random list of accounting terminology along with definitions for these terms, you must be able to select the correct accounting term for the definition given.
  - b. When given questions relating to examining notes, interest, accruals, you must be able to answer the questions correctly with a yes or a no answer.
  - c. When given a business transaction along with a list of account titles, you must be able to correctly indicate for each transaction stated the accounts to be debited and credited.

REQUIRED ACTIVITIES AND EVALUATIONChapter 30 -- Accounting for Notes, Accrued Income, and Accrued Expenses

1. Read Chapter 30
2. Attend an explanation on Chapter 30
3. Drills 30-D1, D2, D3 -- Page 631
4. Problem 30-1 -- Page 632

Self-Test -- Work Study Guide 30

Chapter 31 -- Accrued Income and Accrued Expenses

1. Read Chapter 31
2. Attend an explanation on Chapter 31
3. Problem 31-1 -- Page 652
4. Problem 31-2 -- Page 653

Self-Test -- Work Study Guide 31

Post-Test on the Entire Packet

Objective Test -- Refer to Objective 1 of this packet for what you need to know for the test. Take the test.

## BOOKKEEPING I

## PACKET 11

PRIMARY IDEA: Partnerships and Corporations

SECONDARY IDEAS: 1. Records for forming a partnership  
2. Corporate form of business organization

RATIONALE: The study of these two chapters will aim at acquainting you with the essential differences between the various types of business organizations. Your study up to this point included only that of keeping records for a single proprietor.

OBJECTIVES FOR CHAPTERS 32 AND 33

1. At the completion of the required activities in this packet you must be able to discuss orally with your teacher the following information:
  - a. Some accounting procedures common to the partnership form of business.
  - b. Some accounting procedures peculiar to the corporate type of business.
2. At the completion of the required activities in this packet you must pass an objective test with 70% accuracy on the following information:
  - a. When given statements relating to analyzing partnership accounting you must be able to answer the questions correctly by indicating whether the statement is true or false.
  - b. When given a random list of accounting terminology along with definitions for these terms, you must select the correct accounting term for the definition given.
  - c. When given questions relating to principles of corporation accounting, you must be able to answer the questions by indicating either a yes or a no to the question.

REQUIRED ACTIVITIES AND EVALUATION

Chapter 32 -- Partnerships

1. Read Chapter 32
2. Attend an explanation on Chapter 32
3. Answer the study questions on Page 669
4. Problem 32-1 -- Page 671
5. Problem 32-2 -- Page 671
6. Problem 32-3 -- Page 672
7. Problem 32-4 -- Page 672 (Work only instruction number one)

Self-Test -- Work Study Guide 32Chapter 33 -- Corporations

1. Read Chapter 33
2. Attend an explanation on Chapter 33
3. Answer the study questions on Page 691
4. Problem 33-1 -- Page 692
5. Problem 33-2 -- Page 692
6. Problem 33-3 -- Page 693

Self-Test -- Work Study Guide 33Post-Tests on the Entire Packet

1. Oral Discussion -- Refer to Objective 1 of this packet for what you need to know for this discussion.
2. Objective Test -- Refer to Objective 2 of this packet for what you need to know for this test. Take the test.

## BOOKKEEPING I

## PACKET 12

PRIMARY IDEA: Government Services and Taxation

- SECONDARY IDEAS:
1. The federal, state, and local governments provide many services to the public.
  2. Taxes are levied at the different levels of government in order to pay for the services rendered at each of these levels.
  3. The services provided by the government are limited to the services which cannot be as effectively provided through the private sector of the economy.
  4. Taxation is a means for promoting economic growth.
  5. As a taxpayer it is beneficial for you to be able to prepare accurate income tax returns.

OBJECTIVES

After performing the various activities and reading the material available for you, you should

1. Be able to discuss in writing at least ten services provided by the government.
2. Be able to make a list of five services provided by the government that would be difficult for private industry to provide. With this list discuss in writing the following points:
  - a. How the service benefits him as an individual.
  - b. How the service benefits the economy in general.
  - c. Why the service is provided by the government rather than by private industry.
3. Be able to develop in writing how the federal budget is one of the government's important tools for promoting healthy economic growth.
4. Be able to illustrate the five major tax expenditures for the federal government and offer an effective argument in writing for retaining or changing any of these present categories.
5. Be able to identify the two principle sources of revenue for local, state and federal government and then explain in writing to what extent each tax is progressive or regressive.
6. Be able to recognize the fact that businesses as well as individuals pay large sums of money each year in taxes. After recognizing this fact, be able to identify from various percentages the percent of taxes collected from businesses.

7. Be able to discuss in writing how it is the fundamental responsibility of every citizen to participate constructively in economic decision-making by the government.
8. Be able to explain in writing at least five of the characteristics of a good tax and be able to apply these characteristics to the taxes levied by the government.
9. Be able to prepare in writing an accurate and complete tax return for income under \$1700 and an accurate return for income over \$1700 using the tax tables and a 1040 form.

#### PROCEDURE

1. Before you do any of the following activities you are to work the taxation decision provided for you with this unit and hand it in immediately. At the end of the unit your decisions will be returned to you. Review your first decision, and consider if you possibly would change your decisions in any way after having worked through this unit. If you do decide to change any of your decisions just write change in front of the statement. Discuss your decisions with some members of the class and when you are ready to back up your decisions discuss your taxation decisions with your teacher.
2. You are expected to read and use the booklet from the Federal Government on Understanding Taxes in completing this packet. If needed, there are books available in the library or in the business resource center for your use.
3. At the completion of the activities and when you feel like you have acquired sufficient knowledge on the material stated in the objectives, take the self-test to discover whether you have mastered the necessary information.
4. After you have completed the self-test satisfactorily, you are ready to move into the final evaluation.
5. Hand in your work that you completed doing the individual activities.
6. Your group activities must be completed and the information given to your teacher.

## A TAXATION DECISION

The Hill City school system is badly in need of additional funds in order to provide a comprehensive educational program for the youth of the community. The school board has informed the voters that if more money is not provided, drastic measures and consequences will result. For example, classrooms will become overcrowded, kindergarten and extra-curricular activities will be eliminated, and other services will be restricted. Assume that you are serving on a committee appointed by the local school board charged with solving the problem. What will you recommend?

## DECISION

- \_\_\_\_\_ 1. Ask for an increase in the real estate taxes of the school district.
- \_\_\_\_\_ 2. Provide for a city income tax to be withheld from the paychecks of persons employed within the city.
- \_\_\_\_\_ 3. Recommend that pressure be exerted on our representatives in the State Legislature to pass legislation requiring a greater refund of taxes collected by the state to be used for local schools.
- \_\_\_\_\_ 4. Suggest a special tax to be placed on businesses that cater to the tourist trade.
- \_\_\_\_\_ 5. Adjust the valuation of the undertaxed properties in order to raise the amount of money needed.
- \_\_\_\_\_ 6. Charge tuition or special fees to those enrolled in kindergarten or attending the extracurricular activities.
- \_\_\_\_\_ 7. Require all students to purchase their own books and other school supplies.
- \_\_\_\_\_ 8. Others.

## REASONS

- \_\_\_\_\_ 1. Families who can afford nice homes should bear the cost of providing a comprehensive educational program.
- \_\_\_\_\_ 2. There are too many people who earn their living from a job in the city and who live in the suburbs in order to avoid paying higher property taxes.
- \_\_\_\_\_ 3. At present taxpayers pay too much in taxes to the state for what is returned in services.
- \_\_\_\_\_ 4. People without children should not be required to bear the cost of educating youth.
- \_\_\_\_\_ 5. A business can bear a greater tax burden because it can pass the tax on to others who buy its product or services.
- \_\_\_\_\_ 6. Tourists can afford to pay for the enjoyment they receive and therefore should contribute revenue to the community.
- \_\_\_\_\_ 7. Others.

Source: Economic Cases for Discussion, prepared by the Phi Chapter of Delta Pi Epsilon, 1967.

## OUTLINE

The following outline is provided for you to help you locate information, to help you summarize and organize this information, and to assist you in your overall work and study of this unit.

- I. Government services and taxation
- II. What government services do taxes buy?
  - A. Local services
  - B. State services
  - C. Federal government services
- III. What kinds of taxes do Americans pay?
  - A. Tax principles
    1. Benefits received
    2. Ability to pay
  - B. Kinds of taxes
    1. Progressive
    2. Regressive
    3. Proportional
- IV. Tax policy may be used to influence the economy
- V. Good tax characteristics
- VI. Taxes paid by citizens
  - A. Property tax
  - B. Sales tax
  - C. Excise tax
  - D. Personal income tax
  - E. FICA tax
  - F. Corporation income tax
  - G. State and local income tax
- VII. Filing the personal income taxes for the federal government

REQUIRED INDIVIDUAL ACTIVITIES

1. Keep a notebook of any newspaper items about taxes that you see during the filing period. Become aware of taxes and the use of government funds in our economy.
2. Each student is expected to bring a picture or pictures of some of the many goods and services furnished by the government. Bring these pictures in at the beginning of the unit so that you will begin to become aware of these many services.
3. Each student is to select a service performed by one or more of the three levels of government and explain in writing why it would be difficult to provide this service through private financing.
4. Each student must write an editorial or draw a cartoon to point out the citizen's duties concerning taxation.
5. Define progressive and regressive taxes. Why is the personal income tax in the United States considered to be a progressive tax?
6. On page 11 of Understanding Taxes work as many of the problems necessary to understand how to work this income tax form for under \$1700.
7. On page 13 of Understanding Taxes work as many of these problems necessary for you to understand how to work this problem.
8. Obtain the latest federal income tax form from your teacher and prepare a return for yourself. Check the accuracy of this form with your teacher when completing it.

REQUIRED GROUP ACTIVITIES

The following activities are to be worked and discussed with a group of four students.

Group One Activities -- A written report on numbers 1 through 5 should be handed in and discussed with your teacher at the completion of the group one activities.

1. Should taxes be used to regulate and control as well as to raise revenue? Why? Why not?
2. The fact that taxes are collected by many units of government adds to the expense of collection and makes work for taxpayers. Do you see any solution to this problem? Is it likely to be accepted? Why? Why not?
3. If taxpayers knew exactly what they were paying for given services, would they be less likely to demand more and better services from their government? Why?

4. How can consumers influence the way tax dollars are spent?
5. Interview a member of a local taxpayers' association for his views on the local tax structure. Prepare a set of questions in advance. Find out what your current local property-tax rate is. In connection with this tax make a study as to whether it is a good tax.

Group Two Activities -- The following two projects must be discussed in groups and then presented to the teacher for comments and discussion.

1. How would you recommend financing the following projects? Why?
  - a. A four-year community college free to all residents of your community.
  - b. A new park and playground to be located in a slum area.
  - c. A new park and playground to be located in a high income residential area.
  - d. A new hospital.
  - e. Increased salaries for firemen and teachers.
2. What is your estimate of the cost of building a new school, a library, or road?
  - a. On what is your estimate based? Discuss your plan with businessmen and property owners.
  - b. How do you propose to raise the money needed to carry out this plan?
  - d. Why do you favor this particular source of revenue?

## EVALUATION

### Self-Test

1. Ask your teacher for additional problems on filling out the federal income tax return if you need them. You must be able to fill out this form without the aid of a textbook. Only the tax rate scale may be used.
2. Write the answers to all the objectives that require you to be able to write answers to them. Check these answers with the information you have compiled while working the activities in the packet.

### Post-Tests

1. You are to take a problem test consisting of filing an income tax return.
2. You are to take an essay test on the information you acquired while working the various activities. Refer to the objectives for the specific information you need to know for this test.

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to develop learning packets for individualized instruction for first-year bookkeeping and to evaluate the effectiveness of these packets by using this method of instruction for a two-year period.

The procedure followed for completing this research study involved the participation in a workshop on preparing learning packets, library research, writing the learning packets, and using them for two years in the classroom.

The learning packets correlating the Century 21 Accounting textbook were prepared for use during the 1972-1973 school year. After evaluating the use of these packets, the necessary revisions were made in preparation for the 1973-1974 school year.

#### Summary

The method of instruction used in the classroom should center around the individual student with emphasis placed on the fulfillment of individual needs. One method which emphasizes individual progress in education is the individualization of instruction. This method of instruction was used for two years in the study of bookkeeping utilizing individualized learning packets. The use of these packets gave students an opportunity to progress at their own rate and according to their own abilities.

These learning packets were written for use during the 1972-1973 school year. After using them for a year, the necessary revisions were made in preparation for the second year. These revisions were based on the evaluation of student attitudes and individual progress.

A questionnaire was written to help determine the attitudes of the students and their reactions to this type of instruction.

At the completion of the second year of instruction using the learning packets, the final grade results indicated that 29.1 percent of the students received A's, 3.2 percent made B's, 38.7 percent of the students made C's and 29 percent of the students made D's. There were no students who failed the course.

The results of the questionnaire taken at the beginning and end of the course indicated that by the end of the year most of the students liked individualized, small-group instruction. There was a large percentage of students who were glad they took bookkeeping. It showed a slight increase in the number of students who felt like this type of instruction increased their ability to think. There was also an increase in the number of students who thought that this method of instruction was better than other methods used in the past. It also indicated that by the end of the course there was a drop in the number of students who liked the instruction presented by the teacher.

### Conclusions

1. It was concluded from this study that student self-motivation is an important factor in the successful implementation of individualized instruction in the classroom.

2. By using the learning packets students did not complete as many chapters in their study of bookkeeping, but maintained greater achievement on what they did complete.

3. Student evaluation was more difficult and less objective as it was necessary to grade individuals according to their potentials and progress rather than the standards of the entire class.

4. Most of the students had a positive attitude toward individualized instruction and did enjoy working on their own.

5. Student interest in bookkeeping was fostered at the beginning of the course by the introduction of individualized instruction.

6. When using individualized instruction with a traditional schedule, careful organization and planning on the part of the teacher are essential.

7. Teachers must allow for adjustment to the use of individualized instruction in the classroom.

### Recommendations

1. A flexible type of scheduling is recommended when using individualized learning packets for instruction.

2. In using individualized learning packets in a traditional schedule, it is recommended that numerous audio-visuals should be prepared and employed to enable students to progress through the material without the constant help of the teacher.

3. It is recommended that at least the first packet be presented to the entire class when using the individualized method of instruction.

4. Teachers who use individualization of instruction in the classroom should have a personality that can adjust to a relaxed and unstructured classroom atmosphere.

5. Because of the difference in student ability and interest in studying bookkeeping, more optional learning packets should be written so that students are able to pursue that phase of bookkeeping which might interest them and in which they are capable of working.

6. This method of instruction must be evaluated continually and revisions in the learning packets should be made when necessary.

7. Additional studies need to be conducted to compare student achievement through individualized instruction with students receiving traditional instruction.

4

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APPENDIX

Name \_\_\_\_\_

Date \_\_\_\_\_

Directions: Below are several statements about the period of instruction that you will be beginning. Read each statement carefully and indicate the degree to which you agree or disagree with it according to the following scale. Write the letter or letters that correspond with your attitude in front of the statement.

- SD -- strongly disagree -- I strongly disagree with the statement  
D -- disagree -- I disagree with the statement, but not so strongly  
N -- neutral -- I am neutral toward the statement  
A -- agree -- I agree with the statement, but not so strongly  
SA -- strongly agree -- I strongly agree with the statement

- \_\_\_\_\_ 1. I like instruction presented by a teacher.
- \_\_\_\_\_ 2. I like to work on my own and acquire knowledge on my own.
- \_\_\_\_\_ 3. I find school very boring.
- \_\_\_\_\_ 4. I am glad I am taking bookkeeping.
- \_\_\_\_\_ 5. I think I will like individualized, small-group instruction.
- \_\_\_\_\_ 6. I feel like I will learn less using the individualized approach.
- \_\_\_\_\_ 7. I feel like this type of instruction will increase my ability to think.
- \_\_\_\_\_ 8. I feel like this method of instruction does not seem any better than any other method used in the past.
- \_\_\_\_\_ 9. I feel like I will be isolated and alone during this type of instruction.
- \_\_\_\_\_ 10. I feel uncertain as to my performance in this instruction.
- \_\_\_\_\_ 11. I feel like I will learn faster using this type of instruction.
- \_\_\_\_\_ 12. I feel like this type of instruction will make me want to work harder.

Name \_\_\_\_\_

Date \_\_\_\_\_

Directions: Below are several statements about the type of instruction that you had for this year in the study of bookkeeping. Read each statement carefully and indicate the degree to which you agree or disagree with it according to the following scale. Write the letter or letters that correspond with your attitude in front of the statement.

- SD -- strongly disagree -- I strongly disagree with the statement  
D -- disagree -- I disagree with the statement, but not so strongly  
N -- neutral -- I am neutral toward the statement  
A -- agree -- I agree with the statement, but not strongly  
SA -- strongly agree -- I strongly agree with the statement

- \_\_\_\_\_ 1. I like instruction presented by a teacher.
- \_\_\_\_\_ 2. I did like to work on my own and acquire knowledge on my own.
- \_\_\_\_\_ 3. I did find school very boring.
- \_\_\_\_\_ 4. I am glad I took bookkeeping.
- \_\_\_\_\_ 5. I liked individualized, small-group instruction.
- \_\_\_\_\_ 6. I feel like I learned less using the individualized approach.
- \_\_\_\_\_ 7. I feel like this type of instruction increased my ability to think.
- \_\_\_\_\_ 8. I feel like this method of instruction did not seem any better than any other method used in the past.
- \_\_\_\_\_ 9. I feel like I was isolated and alone during this type of instruction.
- \_\_\_\_\_ 10. I feel uncertain as to my performance in this instruction.
- \_\_\_\_\_ 11. I feel like I learned faster using this type of instruction.
- \_\_\_\_\_ 12. I feel like this type of instruction made me want to work harder.