A Study of the Procedures Utilized in Administering Practice Sets to Beginning Bookkeeping Students in the Upper Peninsula of Michigan.

Ralph J. Williams
Northern Michigan University

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A STUDY OF THE PROCEDURES UTILIZED IN ADMINISTERING PRACTICE SETS TO BEGINNING BOOKKEEPING STUDENTS IN THE UPPER PENINSULA OF MICHIGAN

BY

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Bachelor of Science, 1969
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An Independent Study
Submitted to
Dr. Thomas V. Suchl, Associate Professor
Business Education Department
of
Northern Michigan University
in partial fulfillment of the requirements for the degree
Master of Arts in Education

Marquette, Michigan
January
1972
This independent study submitted by Ralph J. Williams in partial fulfillment of the requirements for the degree of Master of Arts in Education at Northern Michigan University, Marquette, Michigan, is hereby approved by the advisor under whom the work has been done.

Advisor
ACKNOWLEDGEMENTS

The writer would like to express his appreciation to his parents for making it possible for him to obtain his undergraduate and graduate degrees from Northern Michigan University. The writer would also like to express his appreciation to Dr. Thomas V. Buchl for his guidance and assistance in the writing of this study.
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ABSTRACT

A STUDY OF THE PROCEDURES UTILIZED IN ADMINISTERING PRACTICE SETS TO BEGINNING BOOKKEEPING STUDENTS IN THE UPPER PENINSULA OF MICHIGAN

Ralph J. Williams, Master of Arts in Education
Northern Michigan University, 1972

Purpose

The purpose of this independent study was to determine current procedures employed in administering the practice set in first-year bookkeeping by bookkeeping teachers in the Upper Peninsula of Michigan.

Method

Fifty-six questionnaire/opinionnaires were sent to the chairmen of the business education departments in high schools of the Upper Peninsula of Michigan. A total of 45 or 80 percent of the questionnaire/opinionnaires were returned by November 18, 1971. Of the 45 questionnaire/opinionnaires that were returned, two high schools of the Upper Peninsula did not offer a course in bookkeeping. Therefore, the opinions of 43 bookkeeping instructors were used in determining the best possible procedures to utilize in administering the practice set in first-year bookkeeping.
Summary of Findings

1. It should be left up to the individual bookkeeping instructor whether he should work out the solution to the practice set.

2. The practice set should be explained thoroughly to students before any work is begun on the practice set.

3. Each student should examine his or her practice set to see if any parts are missing.

4. It should be left up to the individual bookkeeping instructor whether the entire practice set should be done in ink.

5. The first week of business transactions should be completed as a group.

6. Students are expected to try and solve their own problems on the practice set before they ask for individual help.

7. Any difficult problems that are foreseen by the teacher should be covered when students reach these points as a group.

8. The lower ability students should be given individual help by the instructor on problems they have with the set.

9. Instructors should not continually refer back to the teacher's manual when helping to solve student problems on the practice set.

10. It was not a good idea to let students refer to the teacher's manual when checking their practice set for possible errors.

11. It is not necessary to daily check the progress of students.
12. Students should be able to progress at their own rate rather than being tied down to a daily schedule.

13. Students should have the opportunity to work on the practice set at home.

14. It should be left up to the individual teacher whether students should be allowed to work on the practice set cooperatively.

15. Students should be allowed to work on another subject if they complete the practice set ahead of schedule.

16. It is not feasible, due to class scheduling, for students to work on the practice set for a period of time longer than an hour.

17. The instructors were in favor of having students hand in their practice set several times during the semester.

18. A check list should be available for correcting students' errors on the practice set.


20. At a particular date all students should be required to turn in their practice set even though some students are not finished.

21. A final test should be given after the completion of the practice set.
CHAPTER I

INTRODUCTION

For many years the procedures used in administering the practice set in first-year bookkeeping has been a controversial issue among bookkeeping instructors. Almost every bookkeeping instructor will agree that the practice set offers one of the best ways of giving the students some practical knowledge of recordkeeping, except in an actual situation where the bookkeeper keeps a set of books. They feel that the practice set adds a great deal to the mastery and performance of bookkeeping principles and theory. They do not doubt the value of a practice set in first-year bookkeeping.¹

The first "model set of books" published in the United States is credited to Benjamin Booth in 1789. Once, the practice set was the sole means used in teaching bookkeeping. Now, one finds from one-third to one-half of the bookkeeping student's time is devoted to a unified practice set. Bookkeeping principles and procedures are presented first by questions, problems, exercises, and short practice sets. Then when the students are familiar with the principles, an application of them is made in a longer practice set.²


²Harvey A. Andrus, Ways to Teach Bookkeeping and Accounting, (Cincinnati, Ohio: South-Western Publishing Company, 1943), p. 190.
Purpose of the Study

The four purposes of this study were to determine the following:

1. To determine the thinking of the bookkeeping instructors in the Upper Peninsula of Michigan concerning their opinions about bookkeeping in general, and their views relative to the practice set in first-year bookkeeping.

2. To determine the appropriate procedures to use in administering the practice set through the examination of:
   
   A. The preparation needed by the bookkeeping instructor in administering the practice set in first-year bookkeeping.
   
   B. The current methods being used by the bookkeeping instructors of the Upper Peninsula of Michigan.
   
   C. The methods used by the instructors in grading the practice set in first-year bookkeeping.

3. To determine whether or not the practice set can be justified as a worthwhile project in first-year bookkeeping by examining the following:
   
   A. The value the student receives by doing a practice set in first-year bookkeeping.
   
   B. The major problems that the teacher faces when using the practice set in first-year bookkeeping.

4. To determine what types of practice sets preferred by teachers of the Upper Peninsula of Michigan.

Need for the Study

Very little research has been done in regards to the procedures used in administering the practice set in first-year
bookkeeping. Also very little research has been done on the type of practice sets the bookkeeping teacher prefers.

Thus, in order to get an accurate picture of the correct procedures and the types of practice sets preferred by the bookkeeping teachers of the Upper Peninsula of Michigan, the following research was undertaken. The study was designed to determine the procedures and the types of practice sets most commonly used.

Definitions

For use in this study, the following definitions apply:

Adjusting entries--General journal entries that are made at the end of the fiscal period to bring various accounts up to date.

Account--A bookkeeping form that is used to sort and summarize the changes caused by transactions.

Balancing an account--The process of determining the balance of an account, writing it on the smaller side, totaling and ruling the account, and bringing the balance into the new section of the account below the double lines.

Bookkeeping--The preparation and interpretation of financial records of a business.

Bookkeeping cycle--The complete series of activities involved in double-entry bookkeeping during a fiscal period: journalizing, posting, taking a trial balance, preparing the work sheet and financial statements, making adjusting and closing entries, balance and ruling accounts, and preparing a post-closing trial balance.
Class Assignment Method of Administering Practice Sets--"The teacher keeps the entire class together by going over each transaction and each step of the work at the end of the fiscal period with the class doing each step as it is discussed."³

Closing entries--Entries made at the end of a fiscal period to transfer the balance of one account to another.

Double-Entry bookkeeping--That system of bookkeeping under which both the debit and the credit elements of each transaction are recorded.

Fiscal period--The period of time for which an analysis of the business is made.

Individual Progress Method of Administering Practice Sets--"A way in which the practice set can be used as a teaching and learning device is to allow each student to proceed at his own pace."⁴

Journalizing--The process of recording a transaction in a journal.

Posting--The process of transferring journal entries to the ledger.

Post-Closing trial balance--A trial balance taken after the closing entries have been posted and the accounts have been ruled.

Practice set--"Involves the working of a long problem usually covering a one- or two-months time span of business transactions."⁵


⁴Ibid. p. 28.

Private school—A high school that is not controlled by the public.

Public school—A high school supported and controlled by the people.

Recordkeeping—"Under this term is classed the work of posting clerks or entry bookkeepers, payroll clerks, clerks who fill out forms, clerks who take a number from one form or column and place it in another column or on another form, and clerks who routinely operate or monitor bookkeeping machines." 6

Rotation or Office Procedure Method of Administering Practice Sets—"Provides for individual instruction on each unit. The class is divided into small groups with each group working on a different unit." 7

Transaction—In business, any exchange of one value for another.

Using the Practice Set by Teams—"A learning device that many teachers have found practical and workable is to divide the class into teams of three or four students. The teacher attempts to set up the teams so that each team has on it a very able student, a slow learner, and one or two average students." 8


Limitations

Limitations of this study are:

1. The small number of high schools in the Upper Peninsula of Michigan.

2. The small number of bookkeeping teachers in the Upper Peninsula of Michigan.

Delimitations

The study is delimited to:

1. The personality and abilities of the individual teachers.

2. The geographic location of the school districts in the Upper Peninsula of Michigan.

3. The type of textbook used by the Upper Peninsula bookkeeping instructors.

4. The teachers' philosophy as to the purpose of the practice set.

5. The supplementary materials used by the Upper Peninsula bookkeeping instructors.
CHAPTER II

REVIEW OF RELATED LITERATURE

Very little has been written in regard to procedures used in administering the practice set in first-year bookkeeping. In an extensive research of related literature at Northern Michigan University's library pertaining to this area, only one reference was found in which an actual study has been conducted in regard to procedures used in administering practice sets in first-year bookkeeping. All other references in regard to the procedures used in the practice set were of the personal-opinion type and were not necessarily based on actual research studies. Therefore, nearly all of the related literature was limited to that which one would classify as articles written in periodicals and textbooks. These, of course, were not the result of research studies.

There have also been very few research studies written as to the preferences of the teachers in regard to the types of practice sets they use in their programs of study in bookkeeping. Therefore, the related literature was also limited to periodicals and textbooks.

Literature Based on Personal Opinion

The use of the practice set is encouraged because the set helps the student relate and apply bookkeeping theory to activities based on real business situations. They also help to develop the
student's confidence and self-reliance by requiring individual and independent effort over a sustained period of time. Therefore, the practice set is invaluable for motivating students in bookkeeping.

In using the practice set as a learning device Freeman, Hanna, and Kahn recommend the following procedures:

1. The first time you use the practice set, work it out before the class does. Having worked the practice set, you will be better able to anticipate student difficulties and problems and to determine the length of daily assignments.

2. Emphasize the following points at the outset:
   
   A. Records should be neat and legible. All work except the work sheet should be done in ink.
   
   B. All transactions should be recorded immediately in the appropriate journal.
   
   C. Each student is expected to do all he can to solve his own problems and to locate his errors before asking for help from the instructor.
   
   D. Errors should be corrected in accordance with the accepted accounting practices illustrated in the textbook.
   
   E. Practice set materials should be arranged in an orderly fashion for maximum efficiency in working the set.
   
   F. Every instruction and every transaction should be read very carefully before making an entry.
   
   G. As work is completed, it should be systematically checked off by the teacher.

3. Make a daily assignment in the practice set.

4. Hold a daily discussion period over the practice set.

5. Make frequent checks of student progress and accuracy on the practice set.

6. Periodic tests should be given on the practice set.
7. Check the ability of the student to use the information in the practice set.

8. If copying presents a major problem, it may be avoided in part by having each student mark in his practice set one designated figure change.

9. Permit three or four students to work cooperatively on the practice set.

10. Collect and save the best practice sets as models for future classes.

11. Practice sets should, of course, be graded. Brief tests based on the practice set should be given periodically; they provide a good basis for accumulating practice set grades and for spotting student difficulties.¹

Also, so that maximum educational value may be obtained from the practice set, the following instructional procedures were recommended by Musselman and Hanna:

1. The teacher should work out the solution to the practice set before using it in his class.

2. The practice set should be related to the community. The practice set will mean much more to the students if some time is spent relating the set to the community.

3. The practice set should be taught. The teacher should not take the practice set period as a short vacation from teaching.

4. The business forms, journals, and ledger used in the set should be carefully explained.

5. Recording of the opening entries should be carefully supervised.

6. Difficult transactions should be previewed.

7. Diversified teaching should be used.

8. Daily guideposts should be established. In order to keep the class progressing uniformly through

the practice set, the teacher should give definite assignments.

9. Regular evaluation must be planned. Periodic and regular checking and evaluation are necessary to insure that students are keeping their work up to the assignment and are proceeding correctly.  

Zelliot and Leidner comment as follows concerning the teaching methods used by bookkeeping instructors:

No two bookkeeping teachers may follow with equal success any one specific teaching pattern. Even the same teacher often finds it desirable to vary his teaching patterns to suit different student groups.  

All articles reviewed seemed to indicate that there was a definite need for practice sets in first-year bookkeeping and that some value was definitely gained from using practice sets. Clayton and Stearns state:

The general purpose of a practice set is to provide the student with an opportunity to draw together, in a short span of time, the principles of bookkeeping, and accounting previously learned. It requires the personal involvement of each student in a simulated business enterprise in which he is required to analyze transactions, make decisions as to the appropriate journal entries, and construct financial statements reflecting the progress and status of his particular business.  

In a discussion with fellow bookkeeping teachers on the merits of bookkeeping practice sets, Gilmer stated that a number

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of the teachers gave the following reasons for doing a practice set in first-year bookkeeping:

1. The practice set provides a painless, interesting method of review. This is extremely important in the beginning bookkeeping class. The practice set is a distinct learning tool. It should be used as a device for climaxing an organized period of instruction. The practice set will help the student understand terms and facts which were previously vague and misleading.

2. The student can gain practical bookkeeping and accounting experience from completing a practice set.

3. The bookkeeping practice set can provide a stimulating challenge for putting into operation techniques of good business management learned at the particular level of instruction where the set is used.⁵

In another article, Gibbs stated:

Since the practice set represents the student's understanding and actual application of the theories and problems learned throughout the year, it is the most important step in an overall bookkeeping course.⁶

Cunfer shares a similar belief. He says, "As a result, the work on the practice set assumes the nature of a culminating activity, in which the various bookkeeping activities are woven together into one purposeful problem."⁷

In the same article, Cunfer cites, "The practice set provides a reference point in the study of bookkeeping in which the teacher

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can tie in all of the techniques of good teaching and good business procedures together into an effective learning experience."8

Amrein states, "Practice sets should be included so that the student sees the various sets of books necessary in a complete business operation."9

Walker and Beltz believe, "Practice sets with business papers could prove to be an effective and challenging teaching medium which bridges the gap between learning and the final results, that of the practical use of the knowledge acquired."10

The practice set serves as an aid in teaching bookkeeping by bringing together the principles and procedures which have been taught and learned. Potts states:

Practice sets can be a valuable aid in the teaching of bookkeeping. They can furnish training and experience in completing the typical bookkeeping cycle as well as making the student familiar with bookkeeping papers and forms--an experience that is hard to contrive in a classroom other than through the use of a practice set.11

Greco believes, "The main purpose of using a practice set in the bookkeeping class is to provide the student with a practical outlet for the knowledge of bookkeeping which he has acquired."12

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Greco also provides us with the following reasons for using a self-made practice set in first-year bookkeeping:

1. It is an excellent teaching device. The student can "see and understand" bookkeeping theory which otherwise is difficult for him to "see and understand"; the student actually learns by doing. On the other hand, it affords the teacher an easy way to show the student what to do and justify what he is asking of him; it also gives the teacher an insight into what material should be stressed or perhaps explained again.

2. It supplies the teacher with a painless, non-boring method of review, which is extremely necessary in beginning bookkeeping class.

3. It provides the practical experience which the student should have because of the vocational nature of the course, and presents this practical experience in a realistic manner. But most important, using a practice set in this way makes the "teaching of bookkeeping" challenging for the teacher and the "learning of bookkeeping" interesting for the student.15

According to Twiss:

Pupils who have done poor work prior to completing the practice set suddenly turn in completed practice sets rivaling those of the best in the class.14

Carlson adds that:

In early days of the twentieth century, the practice set was the main device for teaching bookkeeping, sort of an apprenticeship basis, but now practice sets are used as a learning application and as a final test as to whether the student has learned the basic principles and can apply them.15

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According to Donahue the practice set makes a significant contribution to the study of the various instructional units studied in the textbook. It provides the student with an opportunity to apply his acquired bookkeeping skills in a practical way. It is important to the student, therefore, that this experience be both instructive and successful.\textsuperscript{16}

Kahn feels that a practice set, if properly used, will dramatize the close relationship between the accurate, up-to-date information supplied by the accounting department and the activities of every other department in a business organization. Furthermore, the practice set helps to develop student confidence and self-reliance, because it supplies new settings for applying principles, provides opportunities to locate errors and rectify them, and requires concentration and effort over a sustained period of time.\textsuperscript{17}

Triplett maintains that the practice set impresses upon the student the variety of journals which may be used in business as well as how the journals can be adapted to suit any particular needs of the student.\textsuperscript{18}

Chaney indicates that almost every bookkeeping teacher will agree that the practice set offers one of the best ways, (except


\textsuperscript{17}Gilbert Kahn, "How To Grade Practice Sets," \textit{Business Education World}, XXXI (October, 1960), p. 27.

in an actual situation where the bookkeeper keeps a set of books, of giving the students practical knowledge of record keeping.¹⁹

Durate reports the following information concerning the value the student receives from completing a practice set in first-year bookkeeping:

Most of the students in the control group regarded the practice set as a valuable learning experience. They felt it cleared up many things previously dis-organized in their minds. There was general agreement that the completion of the practice set had given them a new awareness of the importance and use of business papers in bookkeeping. The main benefit occurring from the use of the practice set was the realistic and prac-tical tie-in of the bookkeeping principles and theory previously learned in an unrelated fashion. Another advantage often expressed was the opportunity which the practice set provided for individual accomplish-ment and the resulting confidence and pride in one's own ability to work on an assignment of this nature.²⁰

Wood believes that a bookkeeping teacher can improve the knowledge students gain from the practice set by doing the fol-low ing:

1. He will keep up-to-date by joining professional organizations and by studying during summer sessions.

2. He will take advanced accounting courses to be prepared for the barrage of questions which will be inevitable from interested students.

3. He will use any initiative or imagination, at his command, to make the subject of bookkeeping interesting and full of fun for his students.

4. He might use the names of students when ill-ustrating journal entries and ledger accounts on the chalk board and begin discussions within the areas of student experiences.


5. He may vary instructions by the use of audiovisual aids: perhaps a tape recording of transactions by two members of the class or, if he is a photography fan, he may use 35mm slides of neat work done by formal students. 21

According to Swanson, a good bookkeeping teacher will do the following in eliminating the possible dangers involved in administering practice sets in first-year bookkeeping:

1. He will spend all his time checking sets instead of teaching.

2. The teacher has eliminated the danger of students proceeding slowly until the end of the time allocated to the set and then resorting to copying to catch up and get the set in on time.

3. He has provided supervisory activities for better students who might otherwise finish ahead of schedule and have nothing to do.

4. The teacher has attempted to eliminate the danger that students will record transactions throughout the set without understanding what they are doing.

5. Finally he will eliminate the danger that the large portion of the course time devoted to the set will be used to test the students and has made it a period of learning. 22

Practice sets have several strong advantages as reported by Boynton:

1. They give the student an opportunity to apply bookkeeping and accounting principles.

2. Practice sets help to bring students closer to vocational practice, particularly if business forms are used.

3. Instills a student's confidence in his work on the practice set.

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4. Stimulate student interest in bookkeeping and the practice set.

5. Engender student pride in his practice set.

6. The student will experience the satisfaction of accomplishment.\textsuperscript{23}

There are three major criticisms of practice sets that were cited by Boynton:

1. They cost too much money for the school system to bear.

2. Practice sets breed cheaters.

3. More profitable time could be spent on new phases of bookkeeping and accounting.\textsuperscript{24}

Dettman listed the following reasons for having multiple practice sets in first-year bookkeeping:

1. \textbf{Realistic Independence.} In the practical bookkeeping situation there are no predetermined figures.

2. \textbf{Greater Resources Developed.} The multiple-set plan places responsibility for making decisions more directly on the student.

3. \textbf{Provision for Individual Differences.} Multiple-sets provide an excellent method for adjusting the course to the abilities and interests of the individual student.

4. \textbf{Better Teaching of Applicability.} By witnessing the activities of classmates who are working different sets and by class reports after the sets have been completed, students can be shown how bookkeeping principles apply to different situations.\textsuperscript{25}


\textsuperscript{24} Ibid. p. 177.

CHAPTER III

PROCEDURES

Construction of Research Topic

On December 17, 1970, a proposal was approved by Dr. Robert N. Hanson for research in Business Education 598, Implications of Research in Business Education. The class criticized the topic and offered recommendations which were utilized in implementing this study.

Selection of Participants

1. The samples for the study were obtained from a listing supplied by the Epsilon Delta Chapter, of Pi Omega Pi Fraternity on the campus of Northern Michigan University.

2. The mailing list was prepared from the directory obtained from the Epsilon Delta Chapter, of Pi Omega Pi Fraternity on the campus of Northern Michigan University.

3. The questionnaire/opinionnaire was prepared and sent to the chairmen of the business education departments in the high schools of the Upper Peninsula of Michigan.

Questionnaire/Opinionnaire Distribution and Returns

The questionnaire/opinionnaire was distributed to the chairmen of the business education departments in the high schools of the Upper Peninsula of Michigan on October 5, 1971. A letter
explaining the nature and importance of this study was sent along with the questionnaire/opinionnaire to all business education chairmen. A copy of the cover letter and questionnaire/opinionnaire can be found in Appendix A on page 41, and Appendix B on page 44, of this independent study.

The questionnaire/opinionnaires were mailed from the post office at Marquette, Michigan, on October 5, 1971. On October 30, 1971, a follow-up letter with a copy of the questionnaire/opinionnaire was sent to business education chairmen who had forgotten to return the questionnaire/opinionnaire by a reasonable time.

On November 15, 1971, the writer of this independent study started compiling the information obtained from the questionnaire/opinionnaires supplied by the business education chairmen of the Upper Peninsula of Michigan.
CHAPTER IV
FINDINGS.

Fifty-six questionnaire/opinionnaires were sent to the chairman of the business education departments in the high schools of the Upper Peninsula of Michigan on October 5, 1971. The purpose of this questionnaire/opinionnaire was to find the different procedures used by the bookkeeping instructors in administering the practice set in first-year bookkeeping.

A total of 45 or 80 percent of the questionnaire/opinionnaires were returned to the writer of this independent study. Of the 45 questionnaire/opinionnaires that were returned, two high schools of the Upper Peninsula of Michigan did not offer a course in bookkeeping. Therefore, the opinions of 43 bookkeeping instructors were used in determining the best possible procedures to use in administering the practice set in first-year bookkeeping. A list of those instructors answering the questionnaire/opinionnaires can be found in Appendix C on page 52 of this study. Also the high schools not returning the questionnaire/opinionnaires can be found in Appendix D on page 56 of this study.

The following information and tables were based on the information received from the questionnaire/opinionnaires returned by the bookkeeping instructors of the Upper Peninsula of Michigan.

Instructors' Opinions on Bookkeeping and Practice Sets

1. The bookkeeping instructors of the Upper Peninsula of Michigan submitted the following information relating their opin-
ions concerning bookkeeping in general, and their views relative to the practice set in first-year bookkeeping:

A. Forty-two bookkeeping instructors reported that they were using the twenty-second and twenty-third editions, while one instructor was using the seventh edition of Twentieth Century Bookkeeping and Accounting, published by South-Western Publishing Company.

B. Observation of data in Table 1, below indicates that 43 bookkeeping instructors of the Upper Peninsula of Michigan covered between 25 to 35 chapters in first-year bookkeeping.

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<tr>
<td>TOTALS</td>
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C. Fifty-three and five tenths percent of the bookkeeping instructors maintain that their course prepares their students for entry level jobs in business today. Twenty-seven and nine tenths percent of the instructors felt that their course did not prepare
their students for business today. Eighteen and six tenths percent of the instructors were undecided on whether the course prepared students for entry level jobs in business today.

D. Seventy-six and seven tenths percent of the high schools in the Upper Peninsula of Michigan did not offer a second year of bookkeeping. Twenty-three and three tenths percent of the high schools did offer a second year of bookkeeping.

E. Inspection of the data in Table 2, below reports that 41 instructors used the practice set that accompanied the textbook they were currently using. Two schools were unable to obtain the practice set because their school system did not have the funds available for such a purchase.

<table>
<thead>
<tr>
<th>Names of Practice Sets</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Bradford Wholesale</td>
<td>8</td>
<td>14.0</td>
</tr>
<tr>
<td>Spencer Athletic Goods</td>
<td>27</td>
<td>47.3</td>
</tr>
<tr>
<td>Talyor Hardware</td>
<td>14</td>
<td>24.6</td>
</tr>
<tr>
<td>Randall Wholesale</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>Clayton Hardware</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Western Leather Goods</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Frank Greer Family</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>57</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

F. Eighty-three and seven tenths percent of the bookkeeping instructors indicated that students should not have a choice in selecting the practice set for the class. Sixteen and three tenths
percent of the instructors thought the students should have a choice in selecting the practice set for the class.

G. Ninety-seven and seven tenths percent of the instructors felt that it would serve no useful purpose to purchase one practice set for several students.

H. The data in Table 3, below states that the instructors of bookkeeping in the Upper Peninsula of Michigan introduce the practice set to the students after they have have completed anywhere from 17 to 30 chapters in the textbook.

<table>
<thead>
<tr>
<th>Number of Chapter Covered</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>17</td>
<td>16</td>
<td>37.2</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>19</td>
<td>12</td>
<td>27.9</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>23.3</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>----</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>TOTALS</td>
<td>43</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

I. Ninety-seven and seven tenths percent of the bookkeeping teachers justified the practice set as a worthwhile project in first-year bookkeeping. Two and three tenths percent of the teachers claim that the practice set was a worthless project and it should not be used in first-year bookkeeping.

J. Eighty-eight and four tenths percent of the teachers stated that a practice set with business papers was more bene-
ficial for the student than those without. Seven percent of the teachers believed that the student received the needed experience by working a practice set without business papers. Four and seven tenths percent of the instructors were undecided as to which type of practice set was beneficial.

K. Sixty-nine and eight tenths percent of the bookkeeping instructors felt it was necessary to vary their teaching methods on the practice set. Twenty-five and six tenths percent of the instructors did not believe it was necessary to vary their teaching methods for the practice set. Four and seven tenths percent of the instructors were undecided as to the appropriate method they should use.

L. Fifty-one and two tenths percent of the teachers stated that each student should do the entire practice set in ink. Forty-four and two tenths percent of the bookkeeping educators did not believe it was necessary to do the entire practice set in ink. Four and seven tenths percent of the instructors were undecided on whether students should be required to do the entire practice set in ink.

M. Forty-eight and eight tenths percent of the bookkeeping instructors of the Upper Peninsula of Michigan did not believe that the main function of the practice set was to test the student's ability to master the different phases of the bookkeeping cycle. Forty-six and five tenths percent of the instructors felt that the main purpose of the practice set was to test the student's ability to master the bookkeeping cycle. Four and seven tenths percent of the teachers were undecided as to the real purpose of the bookkeeping practice set.
N. Seventy-six and seven tenths percent of the bookkeeping instructors thought it was a waste of time saving old practice sets of former students, so that they might use them as models for future classes. Twenty and nine tenths percent of the teachers were in support of saving old practice sets of former students, while two and three tenths percent of the teachers gave no opinion at all.

O. Sixty-two and eight tenths percent of the Upper Peninsula bookkeeping teachers were completely satisfied with the results they obtained from the practice set. Thirty-four and nine tenths percent of the teachers were disappointed with the results they obtained from the practice set. Two and three tenths percent of the teachers were undecided about the results they obtained.

Table 4, on page 26, indicates the bookkeeping instructors' responses to the "yes" and "no" questions of the questionnaire/opinionnaire concerning their views relative to the practice set and bookkeeping in general.

Procedures Used In Administering Practice Sets

2. The bookkeeping instructors of the Upper Peninsula of Michigan recommend the following procedures in administering the practice set in first-year bookkeeping:

A. It should be left up to the individual bookkeeping instructor as to whether he should work out the solution to the practice set.

B. The practice set should be explained thoroughly to the students before any work is begun.
TABLE 4

INSTRUCTORS' RESPONSES TO YES AND NO QUESTIONS.

<table>
<thead>
<tr>
<th>Questions*</th>
<th>Yes</th>
<th>%</th>
<th>Undecided</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>46.5</td>
<td>2</td>
<td>4.7</td>
<td>21</td>
<td>48.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>42</td>
<td>97.7</td>
<td>0</td>
<td>---</td>
<td>1</td>
<td>2.3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>69.8</td>
<td>2</td>
<td>4.7</td>
<td>11</td>
<td>25.5</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>62.8</td>
<td>1</td>
<td>2.3</td>
<td>15</td>
<td>34.9</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>36</td>
<td>83.7</td>
<td>1</td>
<td>2.3</td>
<td>6</td>
<td>14.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>38</td>
<td>88.3</td>
<td>2</td>
<td>4.7</td>
<td>3</td>
<td>7.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>23.3</td>
<td>0</td>
<td>---</td>
<td>33</td>
<td>76.7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>18</td>
<td>41.8</td>
<td>3</td>
<td>7.0</td>
<td>22</td>
<td>51.2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>22</td>
<td>51.2</td>
<td>2</td>
<td>4.7</td>
<td>19</td>
<td>44.3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>37</td>
<td>86.0</td>
<td>1</td>
<td>2.3</td>
<td>5</td>
<td>11.7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>40</td>
<td>93.0</td>
<td>1</td>
<td>2.3</td>
<td>2</td>
<td>4.7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>30</td>
<td>69.7</td>
<td>3</td>
<td>7.0</td>
<td>10</td>
<td>23.3</td>
<td>100</td>
<td></td>
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<td>13</td>
<td>5</td>
<td>11.7</td>
<td>1</td>
<td>2.3</td>
<td>37</td>
<td>86.0</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>29</td>
<td>67.4</td>
<td>0</td>
<td>---</td>
<td>14</td>
<td>32.6</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>41</td>
<td>95.4</td>
<td>1</td>
<td>2.3</td>
<td>1</td>
<td>2.3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>9</td>
<td>20.9</td>
<td>3</td>
<td>7.0</td>
<td>31</td>
<td>72.1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>19</td>
<td>44.2</td>
<td>0</td>
<td>---</td>
<td>24</td>
<td>55.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>9</td>
<td>20.9</td>
<td>1</td>
<td>2.3</td>
<td>33</td>
<td>76.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>11</td>
<td>25.6</td>
<td>2</td>
<td>4.7</td>
<td>30</td>
<td>69.7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>23</td>
<td>53.5</td>
<td>8</td>
<td>18.6</td>
<td>12</td>
<td>27.9</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Two schools did not offer a bookkeeping course.

*The questions numbered in the above table correspond to the first twenty questions of the questionnaire/opinionnaire which can be found in Appendix B on page 44 of this study. The questions numbered in the above table correspond to the views expressed by bookkeeping instructors on pages 21-25 of this independent study.

C. Each student should examine his or her practice set to see if any parts are missing.

D. It should be left up to the individual bookkeeping instructor as to whether the entire practice set should be done in ink.
E. The first envelope of the practice set should be completed as a group.

F. Students are expected to try and solve their own problems on the practice set before they ask for individual help.

G. Any difficult problems that are foreseen by the teacher should be covered when the students reach the area of difficulty.

H. The lower ability students should be given individual help by the instructor on problems they have with the practice set.

I. Instructors should not continually refer back to the teacher's manual when helping to solve students' problems on the practice set.

J. Instructors should not allow students to check their practice set against the teacher's manual for possible errors.

K. Daily progress reports on students' practice sets are not necessary.

L. Students should be able to progress at their own rate rather than being tied down to a daily schedule.

M. Students should have the opportunity to work on the practice set at home.

N. It should be left up to the individual teacher as to whether students should be allowed to work on the practice set cooperatively.

O. Students should be allowed to work on another subject if they complete the practice set ahead of schedule.

P. It is not feasible, due to class scheduling, for students to work on the practice set for any period of time longer than an hour.
Q. A check list should be available for correcting student errors on the practice set.

R. Bookkeeping instructors should use progress charts throughout the practice set.

S. Observation of the data in Table 5 below reveals that 41 bookkeeping instructors were in favor of having the students hand in their practice sets several times during the semester. Due to shortages of school funds, two teachers were unable to purchase practice sets and therefore, did not respond to the questions.

TABLE 5

NUMBER OF TIMES PRACTICE SETS ARE CHECKED

<table>
<thead>
<tr>
<th>Number of Times Checked</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>9.8</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>19.5</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>17.1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Often</td>
<td>18</td>
<td>43.9</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>41</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

T. At a particular date all students should be required to turn in their practice sets even though some students are not finished.

U. Table 6, on page 29, clearly shows that some kind of a final test should be given after the completion of the practice set.

V. A review of the data in Table 7, on page 29, reports that the bookkeeping instructors of the Upper Peninsula of Michigan
will count the practice set anywhere from one-half to one-tenth of the student's grade for a semester.

TABLE 6

TYPES OF TESTS GIVEN ON PRACTICE SETS

<table>
<thead>
<tr>
<th>Types of Tests</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>Objective</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>Standardized</td>
<td>25</td>
<td>58.1</td>
</tr>
<tr>
<td>Own</td>
<td>10</td>
<td>23.3</td>
</tr>
<tr>
<td>Standardized and Own</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>43</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

TABLE 7

INSTRUCTOR' RESPONSES CONCERNING GRADES ON THE PRACTICE SET AND HOW MUCH THEY SHOULD INFLUENCE A STUDENT'S FINAL GRADE IN BOOKKEEPING

<table>
<thead>
<tr>
<th>Amount of Influence</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>4</td>
<td>9.7</td>
</tr>
<tr>
<td>1/2</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>1/3</td>
<td>5</td>
<td>12.2</td>
</tr>
<tr>
<td>1/4</td>
<td>12</td>
<td>29.5</td>
</tr>
<tr>
<td>1/5</td>
<td>6</td>
<td>14.6</td>
</tr>
<tr>
<td>1/6</td>
<td>7</td>
<td>17.0</td>
</tr>
<tr>
<td>1/7</td>
<td>0</td>
<td>----</td>
</tr>
<tr>
<td>1/8</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>1/9</td>
<td>0</td>
<td>----</td>
</tr>
<tr>
<td>1/10</td>
<td>4</td>
<td>9.7</td>
</tr>
<tr>
<td>TOTALS</td>
<td>41</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

W. Inspection of the data in Table 8, on page 30, indicates that the following standards were used in determining a student's grade on the practice set.
<table>
<thead>
<tr>
<th>Standards</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>27</td>
<td>29.6</td>
</tr>
<tr>
<td>Neatness</td>
<td>29</td>
<td>31.7</td>
</tr>
<tr>
<td>Procedures</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>Comprehension</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Completeness</td>
<td>11</td>
<td>11.1</td>
</tr>
<tr>
<td>Interpretation of Financial Statements</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Tests</td>
<td>9</td>
<td>8.9</td>
</tr>
<tr>
<td>Legibility</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Independence of Students When Working on the Set</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Major and Minor Mistakes</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Time Element</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Attitude of Students Toward Set</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Knowledge of Business Forms</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Interpretation of Journals</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>93</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
The data in Table 9, on page 32, represents the bookkeeping instructors' responses to the 27 questions of the questionnaire/opinionnaire concerning the procedures they utilized when using a practice set in first-year bookkeeping.

**Reasons For Doing A Practice Set**

3. The data in Table 10, on page 33, presents the following reasons why a practice set should be done in first-year bookkeeping.

   A. The student learns how to complete a project on his own.

   B. The practice set gives students the practical experience in keeping a set of books for a business.

   C. By completing a practice set the student obtains a better understanding of the bookkeeping cycle.

   D. The practice set gives the student a comprehensive review of bookkeeping principles and theories.

   E. By doing the practice set the student becomes familiar with business forms and financial records.

   F. The practice set makes bookkeeping a more meaningful course for students.

   G. The practice set increases the student interest in bookkeeping.

   H. The practice set gives the instructor insight into the problems that students might encounter in bookkeeping.

   I. By completing a practice set students will learn to appreciate the business community.

**Reasons For Not Doing A Practice Set**

Table 11, on page 34, lists the following problems that the bookkeeping instructors of the Upper Peninsula of Michigan have faced in prior years.
### TABLE 9  
**INSTRUCTORS' RESPONSES TO PROCEDURES THEY USED IN ADMINISTERING THE PRACTICE SET IN FIRST-YEAR BOOKKEEPING**

<table>
<thead>
<tr>
<th>Questions**</th>
<th>I do this Always %</th>
<th>I do this Sometimes %</th>
<th>I do not do this but it has merit %</th>
<th>I do not do this it has no merit %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>97.7</td>
<td>0</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>86.0</td>
<td>1</td>
<td>2.3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
<td>76.7</td>
<td>4</td>
<td>9.3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>34.9</td>
<td>9</td>
<td>20.9</td>
<td>7</td>
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<tr>
<td>5</td>
<td>4</td>
<td>9.3</td>
<td>22</td>
<td>51.2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>60.5</td>
<td>14</td>
<td>32.6</td>
<td>0</td>
</tr>
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<td>7</td>
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<td>9.3</td>
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<td>18.6</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>39.5</td>
<td>19</td>
<td>44.2</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>4.7</td>
<td>14</td>
<td>32.6</td>
<td>17</td>
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<tr>
<td>10</td>
<td>2</td>
<td>4.7</td>
<td>17</td>
<td>39.5</td>
<td>6</td>
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<tr>
<td>11</td>
<td>17</td>
<td>39.5</td>
<td>6</td>
<td>14.0</td>
<td>5</td>
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<tr>
<td>12</td>
<td>9</td>
<td>20.9</td>
<td>19</td>
<td>44.2</td>
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<td>37.2</td>
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<tr>
<td>14</td>
<td>34</td>
<td>79.0</td>
<td>7</td>
<td>16.3</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>9</td>
<td>20.9</td>
<td>7</td>
<td>16.3</td>
<td>19</td>
</tr>
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<td>16</td>
<td>9</td>
<td>20.9</td>
<td>11</td>
<td>25.6</td>
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</tr>
<tr>
<td>17</td>
<td>5</td>
<td>11.6</td>
<td>7</td>
<td>16.3</td>
<td>15</td>
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<tr>
<td>18</td>
<td>5</td>
<td>11.6</td>
<td>7</td>
<td>9.3</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>31</td>
<td>72.0</td>
<td>6</td>
<td>14.0</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>16</td>
<td>37.2</td>
<td>7</td>
<td>16.3</td>
<td>7</td>
</tr>
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<td>33</td>
<td>76.7</td>
<td>5</td>
<td>11.6</td>
<td>3</td>
</tr>
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<td>6</td>
<td>11.0</td>
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<td>58.1</td>
<td>12</td>
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</tr>
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<td>51.2</td>
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<td>20.9</td>
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<td>25</td>
<td>18</td>
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<td>1</td>
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<td>8</td>
</tr>
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<td>2</td>
<td>4.7</td>
<td>5</td>
<td>11.6</td>
<td>16</td>
</tr>
</tbody>
</table>

NOTE: Two schools did not offer a bookkeeping course.

*The questions numbered in the above table corresponds to the last 27 questions of the questionnaire/opinionnaire which can be found in Appendix B on page 114, of this study.*

*The questions numbered in the above table corresponds to the views expressed by bookkeeping instructors on pages 25-28, of this independent study.*
<table>
<thead>
<tr>
<th>Reasons*</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>C</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>D</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>E</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*The reasons lettered in the above table correspond to the ones mentioned on page 31 of this study.

A. One-fourth of the instructors reported no problems at all.

B. Keeping the entire class together throughout the practice set.

C. Some students are not ready to tackle the practice set in first-year bookkeeping.

D. Keeping the students up to a deadline date.

E. The practice set is a time consuming project that requires a lot of time for students to complete.

F. Not all the student's work can be done in class.

G. The cheating that occurs on the practice set.

H. The student has great difficulty working on his own.

The student also has difficulty applying his knowledge of bookkeeping to the practice set.
I. Getting students to follow directions on the practice set.

J. Having students locate their errors made in the practice set.

K. Student absenteeism and make-up work on the practice set.

L. Cost of the practice set absorbed by the school system.

M. Getting students to interpret source documents.

**TABLE 11**

**PROBLEMS ENCOUNTERED ON THE PRACTICE SET**

**IN FIRST-YEAR BOOKKEEPING**

<table>
<thead>
<tr>
<th>Problems*</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>14</td>
<td>25.4</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>7.3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>E</td>
<td>6</td>
<td>10.9</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>G</td>
<td>7</td>
<td>12.7</td>
</tr>
<tr>
<td>H</td>
<td>9</td>
<td>16.4</td>
</tr>
<tr>
<td>I</td>
<td>7</td>
<td>12.7</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>L</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>55</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*The problems lettered in the above table correspond to the ones mentioned on pages 33 and 34 of this study.

**Types of Practice Sets Preferred**

4. It was found that the bookkeeping instructors of the Upper Peninsula of Michigan preferred to have students work on
practice sets that were designed for a single proprietorship and which carried on routine business transactions.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The following summary was made on the basis of the 43 questionnaire/opinionnaires that were returned to the author of this independent study:

1. A majority of the bookkeeping instructors of the Upper Peninsula of Michigan are using some form of the Twentieth Century Bookkeeping and Accounting textbook, published by the South-Western Publishing Company.

2. Bookkeeping instructors recommended that a practice set be used in first-year bookkeeping.

3. A majority of the bookkeeping instructors suggested that a practice set with business papers be used in first-year bookkeeping.

4. The entire contents of the chapters covered prior to the practice set should be thoroughly understood by the students before starting a practice set.

5. Bookkeeping instructors stated that they should vary their teaching methods on each new practice set that they purchase.

6. Bookkeeping teachers were evenly divided as to the main function of the practice set.

7. Students should not have the opportunity to select the practice set they would like to work on.
8. Most teachers indicated that it would be a waste of time to purchase one practice set for several students.

9. All unfamiliar practice sets should be worked by the teacher before they are distributed to the class. This will result in anticipation of difficult practice set problems that may be encountered by students.

10. Each student should be required to examine his or her practice set to see if any materials are missing.

11. The practice set should be explained thoroughly before any work is begun.

12. Students should be able to progress at their own rate rather than being tied down to a daily schedule.

13. Students should not be allowed to take the practice set home, except when they have been absent from school for a long period of time.

14. Copying presents a major problem when working the practice set.

15. A majority of bookkeeping instructors thought it was necessary to complete the entire practice set in ink.

16. Under no circumstances should the student be allowed to check the practice set against the teacher's manual.

17. If the student completes the practice set ahead of schedule he should be able to work on another subject.

18. A final test should be given over the entire practice set after students have completed their individual sets. The test should measure the student's ability to interpret (1) source documents, (2) business transactions, (3) journals and journal entries, (4) ledgers, and (5) financial statements.
19. A student's practice set should be collected and graded several times during the semester.

20. A student's final grade on the practice set should be based on the following criteria: (1) accuracy, (2) neatness, (3) legibility, (4) procedure, (5) completeness, (6) independence of students while working on the practice set, and (7) final test.

21. It would be a waste of time to save a former student's practice set so that the instructor can use it as a model for future classes.

22. Most of the teachers were completely satisfied with the results they obtained from the practice sets their classes have worked.

23. A majority of the schools of the Upper Peninsula of Michigan did not offer a second year of bookkeeping.

24. Instructors were almost evenly divided as to whether bookkeeping helped to prepare students to enter the business world.

25. If the school funds are available, desks should be purchased that will allow students ample room to work on the practice set and bookkeeping problems.

Conclusions

1. Bookkeeping instructors used the practice set with business papers that accompanied the textbook they were currently using in their classes.

2. Bookkeeping teachers covered between 17 and 30 chapters in the textbook prior to introducing the practice set to their students.
3. The practice set was checked by bookkeeping instructors several times during the semester.

4. Students were able to progress at their own rate rather than being tied down to a daily schedule.

5. Bookkeeping instructors will count the practice set anywhere from one-half to one-tenth of the student's grade for a semester.

6. The most common type of test given on the practice set was standardized.

7. A majority of bookkeeping teachers used the following standards in determining a student's grade on the practice set: (1) accuracy, (2) neatness, (3) procedure, (4) comprehension, and (5) completeness.

Recommendations

A large percentage of the student's time in bookkeeping is spent working on a practice set, therefore, this time should be used as efficiently as possible. In order to do this, an instructor must adopt a procedure that will make the practice set a worthwhile and meaningful project for the students to complete.

The practice set should help students better understand business procedures and increase their chances for successful employment in business today. It is the desire of the author that the following recommendations will help the instructors of the Upper Peninsula of Michigan achieve the following goals.

1. The practice set that is selected by bookkeeping instructors should contain business papers.
2. The entire contents of chapters covered prior to the practice set should be thoroughly understood by students before work is begun on the practice set.

3. After the first week of business transactions have been completed as a group, students should then be allowed to do the remainder of the practice set on their own.

4. It is the writer's opinion that the practice set should count one-fourth of a student's semester grade.
APPENDIX A
Chairman, Business Education Department

Dear Business Educator:

I am a graduate student at Northern Michigan University conducting a survey of Upper Peninsula business education teachers. The survey will attempt to see what procedures teachers are utilizing in administering practice sets in beginning bookkeeping. I would appreciate your help by having you make some contributions on the ideas and methods of improving the student learning in this vital area of bookkeeping.

Since practice sets are expensive to buy and time consuming for students to complete, I would like your help in determining the value you place upon the practice set in first-year bookkeeping. The questionnaire should take about 15 to 20 minutes to complete. So will you take time out today from your busy schedule and complete the questionnaire and return it to me in the enclosed, stamped, self-addressed envelope?

With your help, I am sure that a better method can be developed in administering practice sets in first-year bookkeeping which in turn will increase the benefits the students can receive from these sets. Thank you very much for your help.

Sincerely yours,

Ralph J. Williams
Chairman, Business Education Department

Dear Business Educator:

This is just a reminder that you have not returned the completed questionnaire to me concerning the procedures you employ in handling practice sets in first-year bookkeeping. Would you please do so today? A good response from bookkeeping instructors from the Upper Peninsula of Michigan will insure a better survey and a more valuable study. If you have already returned the questionnaire, I would like to take this time to thank you again for your cooperation.

Yours truly,

Ralph J. Williams
APPENDIX B
RETURN QUESTIONNAIRE TO: Ralph J. Williams
305 Spooner Hall
Marquette, Michigan 49855

A STUDY OF THE PROCEDURES UTILIZED IN ADMINISTERING PRACTICE SETS TO BEGINNING BOOKKEEPING STUDENTS IN THE UPPER PENINSULA OF MICHIGAN.

PURPOSE: A major criticism of a practice set is that bookkeeping students do not receive the maximum benefit from the practice set. This is because of poor administering procedures used in first-year bookkeeping. Therefore, the purpose of this questionnaire is to increase the effectiveness of the practice set in first-year bookkeeping by analyzing the current procedures of administering practice sets in the Upper Peninsula of Michigan. Your cooperation in filling out this questionnaire will be very much appreciated and all information will be held confidential.

DIRECTIONS: The questions on the following pages pertain, directly or indirectly, to practice sets in bookkeeping. Answer every question in such a way as to convey your exact feelings. Most questions will pertain to your bookkeeping class this year. If you are not teaching bookkeeping this year, pass this questionnaire on to the person teaching this course in your school or base your answers to the questionnaire on the last time you taught it.

Part I: Circle the "Yes" or "No" preceding the number for each of the following questions to indicate your answer to that question.

Yes No 1. Do you feel that the main function of the bookkeeping practice set is to test the student's ability to master the different phases of the bookkeeping cycle?

Yes No 2. Do you think that the practice set is a worthwhile project that should be used in first-year bookkeeping?

Yes No 3. Do you feel it is necessary to vary your teaching methods for each practice set according to the different abilities of each group of students in your class?

Yes No 4. Are you completely satisfied with the results obtained from the practice set in the past?

Yes No 5. Do you usually give practice sets with business papers?

Yes No 6. In referring back to the above question, do you feel that the practice set with business papers is more beneficial to the student than a practice set without business papers?
Yes No 7. Does the school system in which you teach offer more than one year of bookkeeping?

Yes No 8. Do you work every practice set yourself before assigning it to your students?

Yes No 9. Do you feel it is necessary that the student do the entire practice set in ink?

Yes No 10. Do you feel that each student is expected to do all he can to solve his own problems and to locate his errors before asking for help from the instructor?

Yes No 11. Do you agree that the practice set materials should be arranged in an orderly fashion for maximum efficiency in student work?

Yes No 12. Do you require a systematic check of the practice set to avoid duplication or omission errors that are often caused by interruptions?

Yes No 13. Do you make a daily assignment in the practice set?

Yes No 14. Do you think it is very beneficial to hold discussion periods with the students while working the practice set?

Yes No 15. Do you make frequent checks on student progress in the practice set?

Yes No 16. Do you feel it is better to give periodic tests throughout the practice set rather than just one at the end?

Yes No 17. Do you permit three or five students to work cooperatively on the practice set?

Yes No 18. Do you collect and save the best sets as models for future classes?

Yes No 19. Does copying present a major problem when working a practice set in your class?

Yes No 20. Do you think high school bookkeeping courses prepare students to meet the needs of business today?

Part II: Answer each question in this part with a brief but complete answer.

1. How many first-year bookkeeping classes have you taught?

2. Give the following information relative to the bookkeeping textbook you are currently using.

Title: ________________________________

Author(s): ________________________________
3. How many practice sets do you think you will use this year in your class? __________

4. List the names and publishing company of the practice set you are using this year.

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--------------------------------------------------

ANSWER EITHER QUESTION NUMBER 5 OR 6--NOT BOTH OF THEM:

5. List the reasons why, if you do not require the completion of a practice set in first-year bookkeeping.

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6. If you do require the completion of a practice set in first-year bookkeeping, list the reasons for doing so.

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7. How many chapters do you finish before you start the practice set? __________
8. How many chapters of the textbook do you finish by the end of the year? __________

9. How much does the practice set count toward the student's grade for the semester? __________

10. How many times during the administering of the practice set do you check and grade the progress of the students? __________

11. In grading the practice set what do you base the student's grade on?

12. What type of test do you administer on the practice set?

13. What do you feel are the major problems you face when using the practice set in first-year bookkeeping.

Part III: Place a check mark in the appropriate column to the right of each of the following statements.

<table>
<thead>
<tr>
<th>I DO THIS</th>
<th>I do not do this</th>
<th>I do not do this</th>
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<tr>
<td>all some</td>
<td>but it</td>
<td>it has</td>
</tr>
<tr>
<td>ways times</td>
<td>has merit</td>
<td>no merit</td>
</tr>
</tbody>
</table>

1. The practice set is introd-
<table>
<thead>
<tr>
<th></th>
<th>I DO THIS</th>
<th>I do not do this but it has merit</th>
<th>I do not do this it has no merit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>ucved to the class and the practice set is explained.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>Have each student examine his or her practice set to see if the set is complete.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>The type of business that is involved in the practice set is discussed with the students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>You the teacher have worked the practice set out before hand.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>The teacher frequently refers to the manual when helping students solve difficult problems in the practice set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.</strong></td>
<td>The teacher will give individual help to lower ability students rather than holding class discussion periods on the practice set problems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7.</strong></td>
<td>A daily assignment is given throughout the practice set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8.</strong></td>
<td>Any difficult problems that are foreseen in the practice set are clarified by the teacher when students reach these points as a group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9.</strong></td>
<td>The teacher checks the daily assignment of the students by selecting different business transactions and amounts of those transactions selected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10.</strong></td>
<td>The teacher allows students to check their practice set against the manual for possible errors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I DO THIS</td>
<td>I do not do this but it has merit</td>
<td>I do not do this it has no merit</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>11. Students may work cooperatively on the practice set.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Students are allowed to take home the practice set anytime they want to.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. If a student completes his practice set ahead of schedule he may work on another subject.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Each student is expected to do all he can to solve his own problems and locate his errors before asking for help from the instructor or a classmate.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. The teacher sets up the class schedule so that the students can work on the practice set for more than one hour of time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Practice sets are handed in and checked several times during the semester.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. The teacher uses a check list for correcting errors rather than marking in the practice set.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Progress charts are used by the teacher in administering the practice set throughout the allotted time in the semester.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. All the students in the class are required to finish the practice set.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. At a particular date all practice sets are collected even though some students are not finished.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
21. A final test is given after the completion of the practice set.

22. The teacher uses the test that the publishing company prepares for use along with the practice set.

23. The teacher makes up his own test on the practice set.

24. After the first week of business, transactions in the first envelope are completed as a group; students are then allowed to do the following envelopes on their own.

25. In the early stages of the practice set the teacher usually keeps the students together.

26. One practice set is purchased for each five students (Each student working a different phase of the bookkeeping cycle at different times during the allotted time for the set.)

27. The students are given a choice on the type of a practice set they want to work with. (retail store, wholesale store, or farm sets)

MAKE ANY OTHER COMMENTS THAT YOU FEEL THAT MIGHT HAVE BEEN LEFT OUT OF THIS QUESTIONNAIRE.

________________________________________

________________________________________

________________________________________

________________________________________

Signature of Teacher

Name of School
BUSINESS EDUCATORS IN THE UPPER PENINSULA OF MICHIGAN
THAT ANSWERED THE QUESTIONNAIRE/OPINIONNAIRE

1. Archambeau, Clyde, Osceloa Township High School, Dollar Bay, Michigan 49922

2. Arnold, Stanley D., Central High School, Manistique, Michigan 49854

3. Ashman, Robert J., Calumet High School, Calumet, Michigan 49913

4. Barbeau, Dorothy, Whitefish High School, Paradise, Michigan 49768

5. Beaver, Neil, Burt Township High School, Grand Marais, Michigan 49839


7. Braamse, Gloria, Eben High School, Eben, Michigan 49816

8. Campbell, Martha, Mathias Township High School, Trenary, Michigan 49891


10. Carlson, Rodney, Engadine Consolidation High School, Engadine, Michigan 49827

11. Cruzan, Marvin, Pickford Public High School, Pickford, Michigan 49714

12. Dalpra, Franklin, Forest Park School District, Crystal Falls, Michigan 49920

13. DeBens, Paul, Bark River-Harris High School, Harris, Michigan 49845


15. Doane, Elliot, A. D. Johnston High School, Bessemer, Michigan 49911
<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>School</th>
<th>City, State</th>
<th>Zip Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Gendron, Charles</td>
<td>Gwinn High School</td>
<td>Gwinn, Michigan</td>
<td>49841</td>
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<tr>
<td>18</td>
<td>Haglund, Glenn</td>
<td>West Iron County High School</td>
<td>Stambaugh, Michigan</td>
<td>49964</td>
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<tr>
<td>19</td>
<td>Hayes, Jon</td>
<td>Ishpeming High School</td>
<td>Ishpeming, Michigan</td>
<td>49849</td>
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<tr>
<td>20</td>
<td>Jentoft, Brian</td>
<td>L'Anse Junior and Senior High School</td>
<td>L'Anse, Michigan</td>
<td>49946</td>
</tr>
<tr>
<td>21</td>
<td>Jones, Martha</td>
<td>National Mine High School</td>
<td>National Mine, Michigan</td>
<td>49965</td>
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<tr>
<td>22</td>
<td>Kleiman, Harold A.</td>
<td>Gladstone Area Public Schools</td>
<td>Gladstone, Michigan</td>
<td>49837</td>
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<tr>
<td>23</td>
<td>Kulack, George</td>
<td>Rock Public High School</td>
<td>Rock, Michigan</td>
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<tr>
<td>24</td>
<td>Lawrin, Russel J.</td>
<td>Lake Linden-Hubbell High School</td>
<td>Lake Linden, Michigan</td>
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<td>LeGiven, W.</td>
<td>St. Ignace Public High School</td>
<td>St. Ignace, Michigan</td>
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<tr>
<td>26</td>
<td>Maki, Raymond E.</td>
<td>Berland Community School</td>
<td>Bergland, Michigan</td>
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<td>27</td>
<td>McAuliffe, Joseph</td>
<td>Menominee Senior High School</td>
<td>Menominee, Michigan</td>
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<tr>
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<td>Noel, Arthur D.</td>
<td>Iron Mountain Senior High School</td>
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<td>Person, Halvar</td>
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<td>Popvick, Steve</td>
<td>Luther L. Wright High School</td>
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<td>49938</td>
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<td>31</td>
<td>Rudness, P. A.</td>
<td>Champion-Humbold High School</td>
<td>Champion, Michigan</td>
<td>49814</td>
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<td>32</td>
<td>Sabouri, Paul</td>
<td>Stephenson High School</td>
<td>Stephenson, Michigan</td>
<td>49887</td>
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<td>Seaman, Mynor</td>
<td>Detour Township High School</td>
<td>Detour, Michigan</td>
<td>49725</td>
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<td>34</td>
<td>Sister M. Serena</td>
<td>Ironwood Catholic High School</td>
<td>Ironwood, Michigan</td>
<td>49938</td>
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35. Solberg, Ronald, Carney-Madeau High School, Carney, Michigan 49812
36. Snyder, Gordon, Mather High School, Munising, Michigan 49862
37. Swanson, Gladys, Escanaba Area High School, Escanaba, Michigan 49829
38. Tinti, Rae, Norway-Vulcan High School, White Pine, Michigan 49971
39. Tripp, John, Big Bay de Noc High School, Nahma, Michigan 49864
40. Tromblay, Leonard, Rudyard Township High School, Rudyard, Michigan 49780
41. VarWolverlare, William, Powers-Spaulding High School, Powers, Michigan 49874
42. Waak, Marceline S., Rapid River High School, Rapid River, Michigan 49878
43. Wassberg, Arthur W., Negaunee High School, Negaunee, Michigan 49866
44. Wells, Richard, Gwinn High School, Gwinn, Michigan 49841
45. Williams Anne D., Baraga High School, Baraga, Michigan 49908
APPENDIX D
HIGH SCHOOLS IN THE UPPER PENINSULA OF MICHIGAN
THAT DID NOT ANSWER THE QUESTIONNAIRE/OPTIONNAIRE

1. Baldwin Township High School, Perkins, Michigan 49872
2. Brimely Public High School, Brimely, Michigan 49715
3. Chassel Township High School, Chassel, Michigan 49916
4. Ewen-Trout Creek Consolidation, Ewen, Michigan 49925
5. Flech High School, Flech, Michigan 49831
6. Hancock Central High School, Hancock, Michigan 49930
8. Iron River High School, Stambaugh, Michigan 49964
9. Jeffers High School, Painesdale, Michigan 49955
10. Marquette High School, Marquette, Michigan 49855
11. Republic-Michigamme High School, Republic, Michigan 49879
12. Watersmeet Township High School, Watersmeet, Michigan 49969
13. Wakefield Junior-Senior High School, Wakefield, Michigan 49968
SOURCES CITED

Books


Monographs


Periodicals


Swanson, Robert M. "How To Use Practice Sets As A Learning Device." *Balance Sheet*, XXXVI (December, 1954), p. 163.


Theses

