AN ANALYSIS OF RESPONSE<br>RATES TO A MAILED<br>QUESTIONNAIRE

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## CHAPTER I

## INTRODUCTION

One of the criticisms frequently leveled against vocational education in recent years involves the lack of valid data which depicts what is or is not being accomplished.

Increased emphasis upon accountability has created a need to collect reliable data to document accomplishments. This documentation is frequently dependent upon data gathered from classroom teachers. Usually this information is collected using a questionnaire or standard form request. Often state level administrators spend as much time getting teachers to respond to a request as they do in tabulation and analysis of the data and in reporting the findings. Vocational education teachers often do not realize the importance of the data and may view it as a nuisance that takes time away from what is considered the more important functions of classroom instruction.

Statement of the Problem

Several studies have been done to determine ways to increase the response rate to mail questionnaires. However, the literature does not reflect any studies with emphasis on timing of the request.

The State Department of Vocational and Technical Education needs a considerable amount of data from trade and industrial education teachers to prepare reports for other state and federal agencies. The resources
expended in collecting this data are of considerable concern. Failure to receive the information could affect future program approval, funding levels, teacher certification, and program accountability.

The problem: is there an optimum time to request information from trade and industrial teachers in order to receive the highest response?

Need for the Study

If the study indeed shows a difference in the response rates when requested at different times of the year, then individuals responsible for gathering data could take these differences into consideration when collecting data in the future.

## Purpose of the Study

The purpose of this study is to determine if there is a difference in the response rates to a questionnaire from trade and industrial education teachers in Oklahoma when the questionnaire is transmitted at different times during the school year.

## Research Questions

The specific questions with which this study deals are:

1. Does the month of the year in which the request was made affect the return rate of a mailed questionnaire?
2. Is there a difference in the response rates between the first, second, third, and fourth week after the request is made?
3. Does the trade specialty of the teacher affect the response rate of a mailed questionnaire?
4. Is there a difference in the response rate from the teachers who work in different types of schools?
5. Does the subject's length of time in teaching affect the response rate to a mailed questionnaire?
6. Is there a difference in the response rates to a mailed questionnaire between the education levels of the teachers?

## CHAPTER II

## REVIEW OF THE LITERATURE

The Need for the Study

Low response rates to requests for information or data have plagued educational administrators and researchers for many years. Recently when education at alllevels has been held more accountable for its product the problem of gathering data and information has become even more critical. As a result many studies have been conducted to identify procedures and techniques which can be used to improve return rates of mailed questionnaires. Robinson (1956) identified several procedures which increased return rates. Among them were:
(1) white area on the questionnaire form;
(2) requesting the participation of participants prior to mailing of the instrument;
(3) type of transmittal letter (professional vs. personal);
(4) follow-up letters to non-respondents;
(5) stamped, self-addressed return envelopes; and
(6) incentives.

While these procedures have had a definite positive effect on return rates, there appears to be no research in the education field as to when an inquiry can be most effectively made.

## Previous Research

The mail order marketing industry has completed much research on how to obtain the maximum return on their mail order advertising and marketing efforts. Responses to their mailings can be the difference between profit and loss in their businesses. Vahle (undated) reports on the use of color on billboards, posters, displays and brochure advertising. Its effect upon people of differing age groups, of differing education levels and the color of an individuals eyes were examined. He reports that farmers react more favorably to the color green in the late fall and winter months when the natural colors of summer are not present and to red (the complimentary color of green) during the spring and summer.

Wolf (undated) and Passavant (1972) both report a significant difference in returns to mailed advertising at differing times of the year. Wolf surveyed forty direct response users throughout the United States and found January to yield the greatest returns and June to produce the least returns, with the month of June to yield only 68 percent of the January responses. The month by month results that Wolf observed were:

| Month | Percentage <br> of Response |
| :--- | :---: |
| ${ } }$ | 100.0 |
| February | 96.3 |
| March | 70.0 |
| Apri1 | 71.5 |
| May | 72.0 |
| June | 68.0 |


| Month | Percentage <br> of Response |
| :--- | :---: |
|  | 73.3 |
| August | 84.8 |
| September | 79.0 |
| October | 89.9 |
| November | 80.0 |
| December | 74.0 |

(How to Read: February response was found to be 96.3 percent of the response obtained in January.)

Wilhoit (1975) conducted a study in Oklahoma schools which involved four mailings in November, January, February and April. He reported return rates of 91.1 percent, 85.7 percent, 88.6 percent and 74.3 percent respectively. These results would seem to indicate that the end of the school year is a particularly bad time to request data from teachers. Wilhoit also observed that some researchers avoid holiday and vacation periods in the belief that return rates would be low at those times. He did not however report any specific evidence to that effect. This belief does seem to be supported somewhat by the findings of Wolf previously reported.

The methods used to transmit a questionnaire can have a positive effect on the return rate. Tinnell (1975) had 171 task inventory questionnaires distributed to that number of Oklahoma teachers by their director or dean. The directors (or deans) then collected the questionnaires and returned them. Using this technique 134 ( 80.7 percent) usable questionnaires were recovered. Wilhoit then used Tinnell's 134 returns to define his study population and transmitted his instruments through the same directors (or deans). Inasmuch as

Wilhoit's average return was 84.9 percent, it would seem that this method of collection is comparable to those of Wolf which averaged 79.8 percent.

Because the various methods of achieving increased return rates do seem to be effective, one could conclude that they should not be used if the effect of time-of-transmittal is to be examined. In other words these techniques for increasing return rates become factors to be controlled in a time-of-transmittal study.

## Return Intervals

Baur (1947-48), Lawson (1949), and Manfield (1948) examined the question: "How long should one wait for a questionnaire to be returned?" Robinson and Agism: (1951) summarizing these studies reported that a researcher can reasonably expect to have received 50 percent of the returns to a mailed questionnaire during the first week, 90 percent within two weeks and 98 percent within three weeks. Many researchers seem to be aware of this situation in that one month is frequently used as the "Open Return Period." Tinnell and Wilhoit both used one month periods with seemingly satisfactory results.

## Summary

In summary, the literature reveals little which deals with the specific problem of when is the best time to send questionnaires to teachers. There is however considerable research into methods of increasing the return rate of mailed questionnaires. Employing the various methods of increasing returns seems to typically yield a return rate of approximately 80 percent.

From three weeks to one month seems to be the generally accepted length of time one should allow for returns to come in before taking further recovery action.

## METHODOLOGY

The purpose of this study is to determine if there is a difference in the response rates to a questionnaire from trade and industrial education teachers in Oklahoma when the questionnaire is transmitted at different times during the school year. In pursuing this purpose the following methodology was employed.

Assumptions

1. It was assumed that teachers would in fact return a seemingly meaningful questionnaire if they have an opportunity to complete it.
2. It was assumed that a teacher's work load varies from time to time during the school year resulting in a varying opportunity to complete questionnaires.
3. Based on assumptions one and two above, it was further assumed that because of varying return rates from month to month, there would exist one or more months which would be better than others as far as collecting questionnaire data from teachers is concerned.

Trade and industrial education teachers in Oklahoma were selected to study because of their wide varying backgrounds. Their highest educational attainment ranges from high school to a masters degree plus some additional graduate work, they teach in twenty-seven different occupations, they range from less than one year to over thirty years teaching experience, and they all have at least three years work experience in business or industry in the fields in which they teach.

## Selection of the Instrument

The instrument selected for use in this study was a 200-item task inventory for occupational teachers developed by Tinnell (1975) and employed by Wilhoit (1975). It was felt that this instrument which requires approximately one hour to complete would be sufficiently long to require substantial attention on the part of the respondents but would not be so long as to completely discourage completion. The instrument involves skills directly related to the respondent's employment and would, therefore, seem to be meaningful to the respondents. A copy of the instrument is contained in Appendix $A$.

Collection of Data

The selected respondents were divided into nine approximately equal sized groups using a table of random numbers. The actual process used was to randomly choose one ninth of the population each month between September, 1975 and May, 1976. Instruments were mailed to
each group so chosen on the Saturday preceding the first Monday of each month.

The instruments were sent with prepaid return postage and were imprinted with the return address. A cover letter accompanied each instrument asking the respondent's cooperation in completing the inventory. The instruments were mailed directly to the individual respondents at their school address. No attempt was made to increase the rate of return with incentives, professional pressure or follow-up. Since the researcher was personally acquainted with many of the subjects of the study, it was decided to make the request from someone who was not as well known in order to reduce bias in the study. A copy of the transmittal letter is contained in Appendix B.

## Analysis of Data

As the instruments were returned they were dated and examined for selected data items. The data examined were:

1. The occupational specialty of the respondent,
2. The number of years of teaching experience,
3. The type of school where employed,
4. The highest educational level of the respondent.

The data were then summarized as follows:

1. Return percentages were calculated for the total requests.
2. Return percentages were calculated for each month.
3. Return percentages were calculated for returns received in the first, second, and third week as well as for those over three weeks.
4. The occupational specialties were grouped into seven categories:
(1) construction trades,
(2) metal fabrication trades,
(3) electronics trades,
(4) graphics trades,
(5) industrial cooperative trades,
(6) mechanical trades, and
(7) other trades.

Return percentages were calculated for the groups.
5. The types of schools were grouped by:
(1) comprehensive high schools, and
(2) area vocational-technical schools.

Return percentages were then calculated for the groups.
6. The years of teaching experience were grouped according to:
(1) under three years, and
(2) over three years.

Return percentages were calculated for the groups.
7. Educational level was divided into three groups:
(1) less than Bache1ors degree;
(2) Bachelors degree, and
(3) Masters degree.

Return percentages were then calculated for each group.
The results of these analysis procedures are reported in Chapter IV.

## Limitations

This study was limited to trade and industrial teachers in Oklahoma. No generalization is made or inferred for other groups of subjects.

This study was also limited by the fact that no data was collected during June, July or August. However, it was felt that inasmuch as the schools involved are not generally in operation during these months, this limitation would not be overly restrictive.

Data for this study were collected during the 1975-76 school year. The results may have been influenced by the school calendar or other factors which are subject to change on a year-to-year basis.

## CHAPTER IV

RESULTS

The purpose of this study was to determine if there was a difference in the return rates of a questionnaire from trade and industrial education teachers in Oklahoma when requested at different times during the year.

The subjects of this study represented 120 public high schools and 24 area vocational-technical schools. The 511 trade and industrial education teachers in Oklahoma were asked to complete the task inventory analysis during the fiscal 1976 school year. Examination of the returns revealed three not completed. These three were deleted from the study leaving a total of 508 requests. The total responses from the nine mailing lists were 208 or 40.9 percent leaving 300 or 59.1 percent non-respondents. Figure 1 is a graphic and tabular presentation of the total responses.


Figure 1. Percentages of Total Respondents and Nonrespondents

Examination of the responses by the month reveals the month of April as the highest return rate of 32 or 56.14 percent and November and March as the lowest return rate of 16 each or 28.07 percent. The return rates for the other six months were approximately the same varying from 40.35 percent in February to 44.64 percent in January. Figure 2 represents the percentages returned each month.


Figure 2. Percentage Return by Month

There were a total of 208 teachers who returned the questionnaire. Forty-eight or 23.07 percent were returned the first week, 77 or 37.01 percent were returned during the second week, 61 or 29.32 percent were returned during the third week and 22 or 10.57 percent were returned after the third week. Figure 3 illustrates the total returns on a weekly basis.


Figure 3. Total Responses by Week

Analysis of the return rates by job cluster reveals a seven point spread in the percentage points, metal fabrication was low with 36 percent and electronics was high with 43 percent with the exclusion of the Industrial Cooperative Training (ICT) group. This group had an exceptionally high return rate of 71.4 percent. Figure 4 represents the response rates by trade clusters.


Figure 4. Total Responses by Trade Cluster

There were 233 teachers in the comprehensive high schools and 275 teachers in the area vocational-technical schools. The comprehensive high school teachers returned 102 or 43.77 percent of the questionnaires and the area vocational-technical school teachers returned 106 or 38.54 percent. Figure 5 is a comparison of the comprehensive high school returns to the area vocational-technical school returns.


Figure 5. Total Responses by Types of School

A comparison was made between the response rates and the number of years the teacher has been in the education profession. There were 138 teachers with less than three years teaching experience and 370 teachers with more than three years teaching experience. The less experienced teachers had a return of 68 or 49.27 percent, while the more experienced teachers returned 140 or 37.83 percent. Figure 6 depicts the comparison of the less experienced teacher return rate to the more experienced teacher return rate.


Figure 6. Total Responses by Teaching Experience

Of the 508 teachers surveyed, 197 had less than a Bachelors degree, 181 had a Bachelors degree and 130 had a Masters degree. Analysis of the data revealed 68 or 34.51 percent returns from the group with less than a Bachelors degree, 70 or 38.67 from the Bachelors degree group and 70 or 53.84 percent from the Masters degree group. Figure 7 illustrates the response rate by the three groups.


Figure 7. Total Response Rate by Education Level

There were 197 non-degree teachers surveyed in the study. Of this group, 114 were tenured or had more than three years teaching experience and 83 were non-tenured or had less than three years teaching experience. The tenured teachers returned 35 questionnaires or 30.7 percent while the non-tenured teachers returned 33 or 39.7 percent of the questionnaires. Figure 8 is a comparison of the rate of return of the nondegree tenured teachers to the non-degree non-tenured teachers.


Figure 8. Response Rates of Non-Degree Tenured and Non-Tenured Teachers

There were 311 degree teachers surveyed in this study of which 252 were tenured and 59 were non-tenured. The tenured teachers returned 98 or 38.8 percent of the questionnaires and 42 or 71.2 percent of the non-tenured teachers returned questionnaires. Figure 9 is a comparison of the return rate of the tenured degree teachers and the non-tenured degree teachers.


Figure 9. Response Rates of Degree Tenured and Non-Tenured Teachers

## CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Summary

The purpose of this study was to determine if there is a difference in the response rates to a questionnaire from trade and industrial education teachers in Oklahoma when the questionnaire is transmitted at different times during the school year. In addition to the question three assumptions were made; they were:

1. Teachers will, in fact, return a seemingly meaningful questionnaire if they have an opportunity to complete it.
2. Teachers' work loads vary from time to time during the school year resulting in a varying opportunity to complete questionnaires.
3. Because of varying return rates from month to month, there would exist one or more months which would be better than others as far as collecting questionnaire data from teachers is concerned.

The teachers in all of the approved trade and industrial programs in Oklahoma were randomly divided into nine mailing groups. On the Saturday preceding the first Monday of each month one group was mailed a task inventory questionnaire, they were asked to complete the inventory and return it in the pre-addressed, stamped envelope. When the inventory was returned it was dated and analyzed by trade cluster,
education level of the teacher, type school, time in teaching profession and time in which it was returned.

Of the 511 original requests, three were deleted from the study because they were no longer classroom teachers. The remaining 508 yielded a total of 208 returns or 40.9 percent.

Findings and Conclusions

The April requests produced 32 returns for 56.14 percent, November and March each had 16 returns for 28.07 percent. The responses to the requests in September, October, December, January, February and May generated approximately equal returns ranging from 40.38 percent to 44.64 percent and averaging 42.73 percent.

During the year of this study the Vocational Industrial Clubs of America statewide skill olympics contest was held during the month of April. Prior to this contest, most of the teachers are very busy preparing students for the contest. Wilhoit reported that certain times of the year when people seemingly have extra curricular activities would not be a time to expect favorable responses. His conclusion seems to be supported by the results of this study.

The high response rate for the month of April came as a surprise to this author.

There is considerable difference in the percentage of returns by the month reported herein and Wolf's findings. January was the highest response rate to the mail marketing study but yielded only average return of trade and industrial education teachers. The April mailing produced the highest return rate of the trade and industrial education teachers
but considerably below the average response rate in the mail marketing study.

These differences are understandable in that the respondents were of different make up and the method of responding was completely different. The respondents of this study were asked to give information about their jobs and respondents in Wolf's study were asked to purchase goods or services.

There is evidence to support the notion that different groups of people will respond to a request at a more favorable rate when requested to do so at different times of the year.

Analysis of the returns on a weekly basis reveals that 23 percent of the returns were received during the first week, 36 percent during the second week, 39.32 percent during the third week, and only 10.57 percent were returned after the third week.

Robinson summarized several studies as achieving approximately 60 percent of total returns within two weeks after a request was made. The findings in this study seem to support those of Robinson.

The analysis by trade cluster reveals a return rate approximately equal in all clusters varying from 36 percent to 42.85 percent with the exception of the Industrial Cooperative Training (ICT) teachers. Of this group, 71.4 percent returned the instrument. There are at least two possible reasons for the high response for this group:

1. They do considerably more paper work in the process of their jobs in that they make training agreements for each student with an employer and they make reports on the student's progress and problems after each visit to a training station.
2. The very nature of the day-to-day activities of their group provides them with more time to respond to this type of request.

The teachers in all other trade cluster groups spend six hours each day in classroom or shop instruction and the ICT teachers conduct classes two hours each day, the remainder of the day is devoted to coordinating students and employers at the work station, preparation of lessons and other activities they deem important. It should also be noted that nearly all of the ICT teachers hold a Masters degree. Data presented in Chapter IV reveal that the teachers with the greater amount of college work responded at a higher rate.

There was only a very small percentage ( 5.23 percent) difference between the responses from the comprehensive high schools and the area vocational-technical schools. The comprehensive high schools were slightly higher.

Possible reasons for this difference are:

1. The average education level of the teachers in the comprehensive schools is higher than the area schools.
2. The area vocational-technical schools are a relatively new type of educational institution and these teachers have been bombarded with different studies. They possibly react differently as this number of requests increases.

A comparison was made between the response rates and the number of years teaching experience of the respondent. Forty-nine percent of the teachers with less than three years experience responded while only 37.8 percent of the more experienced teachers responded.

Based on these results one could conclude that the teacher with less experience is more inclined to respond to a questionnaire. It may be that the younger teacher having had less time to become involved in a variety of activities is in a better position timewise to respond to questionnaires than is the older teacher.

There were 197 non-degree teachers surveyed in the study. Of this group, 114 were tenured and 83 were non-tenured. Of the non-tenured teachers, 39.7 percent responded and only 30.7 percent of the tenured teachers surveyed responded.

It is possible the tenured teachers are more secure in their jobs and therefore feel they can exercise more discretion in whether or not to return a questionnaire. The non-tenured teachers because of less job security may feel more compelled to respond.

There were 311 degree teachers surveyed of which 252 were tenured and 59 were non-tenured. Ninety-eight of the 252 tenured teachers responded for 38.8 percent, while 42 of the 59 non-tenured teachers responded for 71.2 percent.

This response also supports the conclusion given above.

This author is personally acquainted with many of the teachers surveyed in the study. Therefore in order to reduce the possibility of biasing the study, all correspondence was between the individual subjects and a less familiar individual (Dr. Tinnell).

One subject who was on the September mailing list enrolled in a course at Oklahoma State University. The subject learned that Dr. Tinnell was teaching the course after he attended the first class in late January. The teacher completed the task inventory analysis and returned it to Dr. Tinnell within one week of his first class meeting.

Although there is no conclusive evidence that it was the only reason it was returned, it is apparent that the personal acquaintance was influential in the subject's actions.

## Recommendations

1. All future mailed requests to the trade and industrial teachers in Oklahoma be made during the early part of April if it is not necessary to have the data at other times during the year.
2. Administrators requesting information by mail from the subjects of this study should avoid making such requests during the months of March and November if it is at all possible.
3. Researchers or administrators making mail requests should use techniques to increase responses as identified on page 4 of this study when they are practical and feasible.
4. The data collected through the task inventory analysis employed in this study should be analyzed and made available to trade and industrial education teacher educators.
5. Future studies being made to determine response rates should be broadened to include all vocational education teachers.

## SELECTED BIBLIOGRAPHY

Baur, E. Jackson. "Response Bias in a Mail Survey." Public Opinion Quarterly, 11 (Winter, 1947-48), pp. 594-600.

Lawson, Faith. "Varying Group Responses to Postal Questionnaires." Public Opinion Quarterly, 13 (Spring, 1949), pp. 114-116.

Manfield, Manual. "A Pattern of Response to Mail Surveys." Public Opinion Quarterly, 12 (Fall, 1948), pp. 493-499.

Passavant, Pierre A. "Yes, Product Groups Do Have Their Seasons in Mailings." Direct Marketing, 34 (April, 1972), pp. 48-54.

Robinson, R. A. and Phillip Agism. "Making Mail Surveys More Reliable." Journal of Marketing, 15 (April, 1951), pp. 415-424.

Robinson, Stanley S. "A Procedure for Securing Returns to Mailed Questionnaires." Sociology and Social Research, 50 (October, 1956), pp. 24-35.

Tinnell, Richard W. "A Task Inventory of Technical Teachers in Oklahoma." (Unpublished Ed.D. dissertation, Oklahoma State University, 1975.)

Vahle, H. Kurt. "The Importance of Color in Advertising." Direct Mail Advertising Association Inc. Manual File 4050 .

Wilhoit, John D. "The Effect of Variation in Job Emphasis on Task Inventory Results." (Unpublished Ed.D. dissertation, Oklahoma State University, 1975.)

Wolf, Florence. "A Study of Direct Mail Responses by Month." Direct Mail Advertising Association, Inc. Manual File 8302.

APPENDIX A

THE INSTRUMENT

## A TASK <br> INVENTORY



Occupational Education moving forward
purpose of the inventory
teis task inventory is designed to help identify the kinds of tasks that teachers do on their jobs and the relative time they gPend doing them. such information can be very helpful in planning RELEVANT TEACHER EdUCATION PROGRAMS.

GENERAL INSTRUCTIONS
COMPLETING the inventory form is very easy and it requires about ONE-HALF HOUR TO DO. FIRST FILL IN THE PROFESSIONAL INFORMATION REQUESTED on page two. then read the instructions and examine the example on PAGE ThREE. THE INSTRUCTIONS WILL TELL YOU HOW TO PROCEED WITH THE REMAINDER OF THE INVENTORY.

LASTLY, PLEASE RETURN THE WHOLE BOOKLET PROMPTIY.

PROFESSIONAL INFORMATION

HOW MANY YEARS HAVE YOU TAUGHT IN YOUR PRESENT POSITION? $\qquad$ HOW MANY TOTAL YEARS HAVE YOU TAUGHT $\qquad$


CHECK THE TYPE OF INSTITUTION THAT YOU WORK FOR:

| JR. HIGH (OR MIDDLE) SCHOOL | $\square$ | POST SECONDARY VOCATIONAL SCHOOL |
| :--- | :--- | :--- | :--- |
| HIGH SCHOOL | $\square$ |  |
| AREA VOCATIONAL SCHOOL | $\square$ | $\square$ |
| PRIVATE VOCATIONAL SCHOOL | $\square$ | $\square$ |

CHECK ALL OF THE DEGREES THAT YOU HOLD AND GIVE THE MAJOR SUBJECTS MAJOR

| CERTIFICATE | $\square$ |  |
| :--- | :--- | :--- |
| ASSOCIATE | $\square$ |  |
| BACHELORS | $\square$ |  |
| MASTERS | $\square$ |  |
| DOCTORATE | $\square$ |  |

WHAT MAIN SUBJECT DO YOU TEACH?
HOW MANY YEARS OF NON-TEACHING EXPERIENCE HAVE YOU HAD IN YOUR SPECIALITY?

INSTRUCTIONS FOR COMPLETING THE TASK INVENTORY

CAREFULLY READ EACH OF THE TASK STATEMENTS AND PLACE A CHECK MARR ( $\checkmark$ ) IN THE COLUMN LABELED CHECK FOR EACH TASK WHICH YOU PERFORM ON YOUR PRESENT JOB.

AFTER CHECKING ALL THE TASKS WHICH YOU PERFORM, RATE ONLY THE TASKS YOU HAVE CHECKED BY PLACING A CHECK MARK ( $\checkmark$ ) IN THE APPROPRIATE TIME SPENT COLUMN.

TIME SPENT MEANS THE RELATIVE TIME YOU SPEND ON THE TASK YOU ARE RATING, COMPARED WITH THE TIME YOU SPEND ON OTHER TASKS YOU DO. IT DOES NOT IMPLY THE IMPORTANCE OF THE TASK TO YOUR JOB. SOME VERY IMPORTANT TASKS TAKE LITTLE TIME WHILE SOME UNIMPORTANT ONES REQUIRE A LOT OF TIME.
at the end of the booklet write in and rate any tasks you do which ARE NOT LISTED.

EXAMPLE:

OCCUPATIONAL EDUCATION TASK INVENTORY


Please rate by RELATIVE TIME SPENT rather than importance of task.

OCCUPATIONAL EDUCATION TASK INVENTORY

| List below any tasks you do which are not included in the booklet, then rate the tasks you have added. | Compared to a typical task you do, rate tne time you spend on each task you list. <br> 1. Very little time <br> 2. Less time <br> 3. About the same time <br> 4. More time <br> 5. Much more time <br> Check ( $\checkmark$ ) the appropriate column |  |
| :---: | :---: | :---: |
|  |  |  |
| ADDITIONAL TASKS |  |  |
|  |  |  |
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| 18. |  |  |
| 19. |  |  |
| 20. |  |  |

Please rate by RELATIVE TIME SPENT rather than importance of task.

## OCCUPATIONAL EDUCATION TASK INVENTORY



Please rate by RELATIVE 1 IME SPENT rather than importance of task.

OCCUPATIONAL EDUCATION TASK INVENTORY


Please rate by RELATIVE TIME SPENI rather than importance of task.


Please rate by RELATIVE TIME SPENT rather than importance of task.

## OCCUPATIONAL EDUCATION TASK INVENTORY



Please rate by RELATIVE TIME SPENT rather than importance of task.

OCCUPATIONAL EDUCATION TASK INVENTORY


Please rate by RELATIVE TIME SPENY rather than importance of task.

| Listed below is a duty and tasks which it includes, check all tasks which you perform, then rate the tasks you have checked. | Check <br> (V) | Compared to a typical task you do, rate the time you spend on each task you checked. <br> 1. Very little time |
| :---: | :---: | :---: |
| - DUTY - <br> ADMINISTERING INSTRUCTIONAL SERVICES | If <br> Done | 2. Less time <br> 3. About the same time <br> 4. More time <br> 5. Much more time <br> Check ( $\checkmark$ ) the appropriate column |
|  |  |  |
| 2. Collect fees | K |  |
| 3. Conduct evening or extension classes |  |  |
| 4. Coordinate a cooperative work program |  |  |
| 5. Coordinate teaching in several programs | $+$ |  |
|  |  |  |
| 6. Handle petty cash |  |  |
| 7. Identify prospective teachers | $\times \times$ |  |
|  |  | + |
| 8. Interview prospective employees | $\otimes$ |  |
| 9. Maintain attendance records |  |  |
|  |  | + |
| 10. Maintain counseling records |  |  |
|  |  | +-4+4-4+4 |
| 11. Maintain financial records |  |  |
| 12. Maintain follow-up records | $\Psi^{\circ}$ |  |
| 13. Majntain placement reeords |  |  |
| 14. Maintain purebasing records | $8$ |  |
| 15. Make teaching assignments |  |  |
| 16. Plan the budget |  | ధ |
| 17. Prepare class schedules |  |  |
| 18. Prepare travei claims |  |  |
| 19. Specify teacher qualifications |  |  |
| 20. Supervise other teachers |  |  |

Please rate by RELATIVE TIME SPENT rather than importance of task.

## OCCUPATIONAL EDUCATION TASK INVENTORY



Please rate by RELATIVE TIME SPENT rather than importance of task.

OCCUPATIONAL EDUCATION TASK INVENTORY


Please rate by RELATIVE TIME SPENE rather than importance of task.

## OCCUPATIONAL EDUCATION TASK INVENTORY



Please rate by RELATIVE TIME SPENT rather than importance of task.

APPENDIX B

TRANSMITTAL LETTER

September 2, 1975

We are conducting a study to determine the jobs and tasks involved in the performance of your duty as a Trade and Industrial Education teacher and the relative time spent doing them. This information is to be used to revise teacher education curriculum in order to make a more meaningful and better quality training for people in your profession. Therefore, we need your assistance as only you can furnish the needed information.

We solicit a little of your time and expertise on your job to furnish the input for this project.

Please fill out the professional information sheet on page two and follow the instructions for completing the task inventory. The booklet has been numbered for the purpose of follow-up and accounting for the booklets. Your name or your school name will be held in strict confidence and will not be associated with the results.

Please give us about one-half hour of your time to complete the inventory and return it by regular mail. The outside of the back cover has been properly addressed and postage affixed. You need only to staple the booklet closed and mail. Thank you for your time.

Sincerely,

Richard W. Tinnell
Research Director
RWT/XK-01/12

APPENDIX C

DATA COLLECTED

## DATA COLLECTED

Column I is the instrument number.
Column II represents the number of years teaching experience of the teacher. Zero (0) represents less than three years, one (1) represents more than three years.

Column III identifies the job cluster of each teacher: Zero (0) represents the construction trades, one (1) represents metal fabrication trades, two (2) represents electronics teachers, three (3) identifies graphics, four (4) identifies the ICT coordinators, five (5) represents the mechanics trades and six (6) represents all others.

Column IV identifies in which type school the teacher was employed. Zero one (01) signifies a comprehensive high school, all other numbers represent an area vocational-technical school.

Column V identifies the week in which the instrument was returned. Zero (0) represents the first week, one (1) represents the second week, two (2) represents the third week, three (3) represents all after the third week, and four (4) indicates not returned.

Column VI identifies the highest degree held by each teacher. Zero (0) and one (1) identifies the teacher as having less than a Bachelors degree, two (2) identifies teachers with a Bachelors degree and three (3) identifies teachers with a Masters degree.
I. II. III. IV. V. VI.

1. $60100 \quad 4 \quad 00 \quad 1 \quad 3$
2. 30100000140
3. $\begin{array}{lllllll}701 & 1 & 5 & 01 & 1 & 2\end{array}$
4. 9010050100
5. 90211000141
6. 50200000140
7. $\begin{array}{lllllll}110 & 1 & 3 & 01 & 2 & 3\end{array}$
8. $801 \quad 1 \quad 5 \quad 00 \quad 3 \quad 2$
9. $802 \quad 1 \quad 5 \quad 00 \quad 4 \quad 3$
10. 702 1 50024
$\begin{array}{lllllll}11 & 603 & 1 & 0 & 02 & 4 & 3\end{array}$
$\begin{array}{lllllll}12 & 803 & 1 & 5 & 02 & 4 & 0\end{array}$
11. $804 \quad 0 \quad 6 \quad 00 \quad 4 \quad 2$
12. $805 \quad 1 \quad 0 \quad 03 \quad 2 \quad 2$
13. $1331 \begin{array}{lllll}133 & 03 & 1 & 0\end{array}$
14. $604 \quad 1 \quad 5 \quad 03 \quad 3 \quad 0$
15. $3021 \begin{array}{llllll} & 1 & 0 & 03 & 0 & 2\end{array}$
16. $806 \quad 1 \quad 6 \quad 03-2$
17. $303 \quad 1 \quad 5 . \quad 03 \quad 3 \quad 0$
18. $\begin{array}{lllllll}501 & 1 & 3 & 03 & 1 & 2\end{array}$
19. $807 \quad 0 \quad 2 \quad 03 \quad 4 \quad 2$
20. $502 \quad 1 \quad 1 \quad 03 \quad 4 \quad 3$
21. $90311 \begin{array}{lllll} & 1 & 03 & 0 & 3\end{array}$
22. $503 \quad 1 \quad 6 \quad 00 \quad 0 \quad 2$
23. $605 \quad 1 \quad 5 \quad 00 \quad 1 \quad 2$
24. $703 \quad 1 \quad 4 \quad 04 \quad 0 \quad 3$
25. $904 \quad 0 \quad 6 \quad 04 \quad 0 \quad 2$
26. $201 \quad 1 \quad 0 \quad 04 \quad 4 \quad 2$
27. $808 \quad 0 \quad 5 \quad 04 \quad 0 \quad 0$
28. $304 \quad 1 \quad 5 \quad 04 \quad 1 \quad 3$
29. $305 \quad 1 \quad 5 \quad 04 \quad 4 \quad 0$
30. $504 \quad 1 \quad 6 \quad 04 \quad 4 \quad 0$
31. $60610004 \quad 4 \quad 0$
I. II. III. IV. V. VI.
32. $810 \quad 1 \quad 2 \quad 04$
33. $811 \quad 0 \quad 4 \quad 04 \quad 0 \quad 3$
34. $401.1 \begin{array}{lllll}4 & 04 & 0 & 3\end{array}$
35. $202 \quad 0 \quad 1 \quad 04 \quad 4 \quad 0$
36. $203 \quad 1 \quad 3 \quad 04 \quad 2 \quad 0$
37. $135 \quad 1 \quad 1 \quad 04 \quad 0 \quad 0$
38. $505 \quad 1 \quad 1 \quad 04 \quad 4 \quad 0$
39. 7040060404
40. $90500600 \quad 0 \quad 3$
41. $607 \quad 1 \quad 5 \quad 00 \quad 4 \quad 0$
42. $812 \quad 1 \quad 0 \quad 00 \quad 3 \quad 2$
43. 204.1
44. $813 \quad 1 \quad 6 \quad 00 \quad 4 \quad 3$
45. $506 \quad 1 \quad 5 \quad 00 \quad 4 \quad 3$
46. $507 \quad 1 \quad 3 \quad 00 \quad 4 \quad 2$
47. $705 \quad 0 \quad 3 \quad 00 \quad 1 \quad 3$
48. $117 \quad 1 \quad 0 \quad 00 \quad 0 \quad 2$
49. $608 \quad 1 \quad 4 \quad 00 \quad 1 \quad 3$
50. $814 \quad 1 \quad 4 \quad 00 \quad 1 \quad 3$
51. 205 1 0005020
52. $815 \quad 1 \quad 5 \quad 05 \quad 4 \quad 0$
53. $508 \quad 1 \quad 5 \quad 05 \quad 1 \quad 0$
54. $\begin{array}{lllllll}706 & 1 & 0 & 05 & 4 & 0\end{array}$
55. $306 \quad 1 \quad 5 \quad 05 \quad 4 \quad 0$
56. $609 \quad 0 \quad 1 \quad 05 \quad 4 \quad 0$
57. $707 \quad 1 \quad 5 \quad 00 \quad 1 \quad 1$
58. $906 \quad 0 \quad 5 \quad 00 \quad 1 \quad 3$
59. $589 \quad 1 \quad 6 \quad 00 \quad 4 \quad 2$
60. $816 \quad 1 \quad 0 \quad 00 \quad 4 \quad 2$
61. $6.0 \quad 1 \quad 6 \quad 00 \quad 4 \quad 3$
62. $708 \quad 1 \quad 5 \quad 06 \quad 4 \quad 2$
63. $907 \quad 1 \quad 5 \quad 06 \quad 2 \quad 2$
64. $402 \quad 0 \quad 3 \quad 06 \quad 4 \quad 2$
I. II. III. IV. V. VI.
I. II. III. IV. V. VI.

| 68. | 206 | 0 | 2 | 06 | 4 | 3 | 103. | 513 | 0 | 1 | 07 | 2 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 69. | 908 | 0 | 1 | 06 | 1 | 0 | 104. | 514 | 1 | 4 | 08 | 4 | 3 |
| 70. | 132 | 1 | 6 | 00 | 3 | 2 | 105. | 212 | 1 | 0 | 08 | 2 | 2 |
| 71. | 709 | 0 | 5 | 00 | 4 | 0 | 106. | 408 | 1 | 5 | 08 | 1 | 0 |
| 72. | 611 | 0 | 5 | 00 | 4 | 2 | 107. | 912 | 1 | 5 | 08 | 1 | 2 |
| 73. | 710 | 1 | 0 | 00 | 4 | 0 | 108. | 213 | 1 | 0 | 08 | 1 | 0 |
| 74. | 403 | 1 | 5 | 00 | 4 | 2 | 109. | 214 | 1 | 0 | 08 | 4 | 3 |
| 75. | 404 | 1 | 1 | 00 | 4 | 0 | 110. | 515 | 1 | 3 | 08 | 4 | 2 |
| 77. | 207 | 0 | 0 | 00 | 4 | 0 | 111. | 108 | 1 | 3 | 08 | 4 | 2 |
| 78. | 910 | 1 | 0 | 00 | 4 | 3 | 112. | 409 | 1 | 2 | 08 | 0 | 2 |
| 79. | 208 | 1 | 0 | 00 | 4 | 0 | 113. | 410 | 0 | 1 | 08 | 1 | 0 |
| 80. | 612 | 0 | 6 | 00 | 4 | 0 | 114. | 615 | 1 | 3 | 08 | 1 | 2 |
| 81. | 144 | 0 | 5 | 00 | 1 | 0 | 115. | 715 | 1 | 1 | 08 | 4 | 3 |
| 82. | 911 | 0 | 6 | 00 | 4 | 2 | 116. | 141 | 1 | 5 | 00 | 0 | 3 |
| 83. | 405 | 0 | 6 | 00 | 0 | 3 | 117. | 411 | 0 | 6 | 00 | 4 | 2 |
| 84. | 711 | 1 | 5 | 00 | 4 | 2 | 118. | 716 | 0 | 6 | 00 | 0 | 3 |
| 85. | 909 | 1 | 6 | 00 | 4 | 2 | 119. | 412 | 0 | 0. | 09 | 2 | 0 |
| 86. | 406 | 1 | 3 | 00 | 4 | 0 | 120. | 820 | 0 | 5 | 09 | 0 | 1 |
| 87. | 510 | 1 | 0 | 00 | 4 | 2 | 121. | 616 | 1 | 5 | 09 | 4 | 2 |
| 88. | 817 | 1 | 5 | 00 | 1 | 2 | 122. | 143 | 0 | 5 | 09 | 4 | 0 |
| 89. | 113 | 1 | 5 | 07 | 4 | 2 | 123. | 913 | 1 | 0 | 09 | 4 | 2 |
| 90. | 613 | 1 | 0 | 07 | 4 | 2 | 124. | 308 | 1 | 3 | 09 | 4 | 3 |
| 91. | 210 | 1 | 0 | 07 | 4 | 2 | 125. | 717 | 1 | 5 | 09 | 4 | 0 |
| 92. | 712 | 0 | 6 | 07 | 4 | 0 | 126. | 154 | 1 | 3 | 09 | 1 | 3 |
| 93. | 713 | 1 | 6 | 07 | 0 | 2 | 127. | 914 | 0 | 0 | 09 | 4 | 0 |
| 94. | 714 | 0 | 5 | 07 | 1 | 0 | 128. | 617 | 1 | 2 | 09 | 2 | 3 |
| 95. | 307 | 1 | 5 | 07 | 4 | 0 | 129. | 821 | 0 | 1 | 09 | 1 | 2 |
| 96. | 614 | 1 | 3 | 07 | 4 | 2 | 130. | 413 | 0 | 5 | 09 | 4 | 0 |
| 97. | 818 | 0 | 2 | 07 | 1 | 2 | 131. | 718 | 1 | 1 | 09 | 0 | 3 |
| 98. | 511 | 1 | 2 | 07 | 1 | 0 | 132. | 414. | 1 | 5 | 00 | 0 | 3 |
| 99. | 819 | 0 | 0 | 07 | 0 | 0 | 133. | 516 | 1 | 4 | 00 | 1 | 3 |
| 100. | 407 | 1 | 1 | 07 | 4 | 0 | 134. | 215 | 0 | 0 | 10 | 3 | 0 |
| 101. | 512 | 1 | 5 | 07 | 4 | 0 | 135. | 822 | 1 | 5 | 10 | 4 | 2 |
| 102. | 211 | 1 | 1 | 07 | 2 | 3 | 136. | 618 | 1 | 5 | 10 | 4 | 2 |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |

I. II. III. IV. V. VI.
137. 150 138. $91500 \quad 5 \quad 10 \quad 4 \quad 0 \quad$ 173. $521 \quad 0 \quad 5 \quad 00$ 139. $823 \quad 0 \quad 2 \quad 10 \quad 1 \quad 0 \quad 174 . \quad 621 \quad 1 \quad 0 \quad 00$ 140. $824 \quad 1 \quad 0 \quad 10 \quad 4 \quad 3 \quad$ 175. $315 \begin{array}{llllllll}315 & 1 & 2 & 00 & 1 & 2\end{array}$ 141. $\begin{array}{llllllllllllll}153 & 0 & 6 & 10 & 4 & 2 & 176 . & 826 & 0 & 5 & 00 & 2 & 2\end{array}$ 142. $415 \quad 1 \quad 5 \quad 10$ 143. $619 \quad 0 \quad 3 \quad 10 \quad 1 \quad 2 \quad 178.151$ 144. $719 \begin{array}{lllllllllllll} & 1 & 2 & 10 & 4 & 3 & 179 . & 827 & 0 & 1 & 00 & 2 & 2\end{array}$ 145. $30912 \begin{array}{lllllllllll} & 10 & 4 & 3 & 180 & 219 & 1 & 0 & 00 & 2 & 0\end{array}$ 146. $517 \begin{array}{lllllllllllll} & 1 & 5 & 10 & 4 & 2 & \text { 181. } & 522 & 1 & 6 & 00 & 4 & 0\end{array}$ 147. 518 1. 1.10
 149. $1031 \begin{array}{lllllllllll} & 1 & 2 & 10 & 4 & 2 & 184 . & 622 & 1 & 4 & 00 \\ 4 & 4\end{array}$ 150. 721 151. 216
 153. $620 \quad 1 \quad 4 \quad 00$ 154. $217 \begin{array}{lllllllllllll} & 0 & 0 & 00 & 1 & 2 & 190 . & 220 & 0 & 5 & 00 & 2 & 0\end{array}$ 155. $120 \quad 1 \quad 6 \quad 00$ 156. $127 \quad 1 \quad 5 \quad 00$ 157. $134 \begin{array}{lllllllllllll} & 1 & 5 & 11 & 4 & 3 & 193 . & 623 & 1 & 0 & 00 & 4 & 3\end{array}$ 158. $519 \quad 1 \quad 1 \quad 11$ 159. $417 \quad 0 \quad 0 \quad 12 \quad 4 \quad 0 \quad 195 . \quad 725 \quad 1 \quad 5 \quad 13$ 160. $14511 \begin{array}{lllllllllll} & 12 & 12 & 4 & 0 & 196 & 726 & 1 & 5 & 13 & 4\end{array} 0$ 161. $722 \begin{array}{llllllllllll} & 1 & 5 & 12 & 4 & 0 & \text { 197. } & 727 & 1 & 0 & 13 & 4\end{array} 0$ 162. 149120
 164. 310 1 50 165. 111 166. 311 1 $1 \begin{array}{llllllllllll}2 & 12 & 4 & 2 & 202 . & 9.9 & 1 & 3 & 0 & 4 & 2\end{array}$ 167. $312 \begin{array}{lllllllllllll} & 1 & 3 & 12 & 4 & 2 & 203 . & 317 & 1 & 5 & 00 & 1 & 2\end{array}$ 168. $723 \quad 1 \quad 1 \quad 12 \begin{array}{llllllllll} & 1 & 2 & 204 . & 318 & 1 & 5 & 00 & 1 & 2\end{array}$ 169. $313 \quad 1 \quad 6 \quad 12 \begin{array}{llllllllll} & 4 & 2 & 205 . & 129 & 0 & 6 & 00 & 1 & 3\end{array}$ 170. 8750
I. II. III. IV. V. VI. 208. $625 \quad 1 \quad 6 \quad 00 \quad 4 \quad 2 \quad 243$. 124 209. $830 \begin{array}{lllllllllllll} & 1 & 0 & 00 & 2 & 3 & 244 . & 118 & 1 & 5 & 00 & 4 & 2\end{array}$ 210. $222 \begin{array}{lllllllllllll} & 1 & 5 & 00 & 4 & 2 & 245 . & 730 & 1 & 5 & 00 & 4 & 2\end{array}$ 211. $526 \begin{array}{lllllllllllll} & 0 & 6 & 00 & 4 & 2 & 246 & 924 & 1 & 5 & 00 & 4 & 0\end{array}$
 $\begin{array}{llllllllllllll}\text { 213. } & 527 & 1 & 4 & 00 & 2 & 3 & 248 . & 322 & 1 & 0 & 00 & 4 & 0 \\ \text { 214. } & 920 & 0 & 3 & 00 & 4 & 0 & 249 . & 229 & 1 & 6 & 00 & 4 & 2 \\ \text { 215. } & 528 & 1 & 0 & 14 & 4 & 0 & 250 . & 230 & 1 & 6 & 00 & 2 & 0 \\ 216 . & 921 & 1 & 5 & 14 & 0 & 2 & 251 . & 424 & 0 & 3 & 00 & 0 & 2\end{array}$ $\begin{array}{llllllllllllll}\text { 213. } & 527 & 1 & 4 & 00 & 2 & 3 & 248 . & 322 & 1 & 0 & 00 & 4 & 0 \\ \text { 214. } & 920 & 0 & 3 & 00 & 4 & 0 & 249 . & 229 & 1 & 6 & 00 & 4 & 2 \\ \text { 215. } & 528 & 1 & 0 & 14 & 4 & 0 & 250 . & 230 & 1 & 6 & 00 & 2 & 0 \\ 216 . & 921 & 1 & 5 & 14 & 0 & 2 & 251 . & 424 & 0 & 3 & 00 & 0 & 2\end{array}$ $\begin{array}{llllllllllllll}\text { 213. } & 527 & 1 & 4 & 00 & 2 & 3 & 248 . & 322 & 1 & 0 & 00 & 4 & 0 \\ \text { 214. } & 920 & 0 & 3 & 00 & 4 & 0 & 249 . & 229 & 1 & 6 & 00 & 4 & 2 \\ \text { 215. } & 528 & 1 & 0 & 14 & 4 & 0 & 250 . & 230 & 1 & 6 & 00 & 2 & 0 \\ 216 . & 921 & 1 & 5 & 14 & 0 & 2 & 251 . & 424 & 0 & 3 & 00 & 0 & 2\end{array}$ $\begin{array}{llllllllllllll}\text { 213. } & 527 & 1 & 4 & 00 & 2 & 3 & 248 . & 322 & 1 & 0 & 00 & 4 & 0 \\ \text { 214. } & 920 & 0 & 3 & 00 & 4 & 0 & 249 . & 229 & 1 & 6 & 00 & 4 & 2 \\ \text { 215. } & 528 & 1 & 0 & 14 & 4 & 0 & 250 . & 230 & 1 & 6 & 00 & 2 & 0 \\ 216 . & 921 & 1 & 5 & 14 & 0 & 2 & 251 . & 424 & 0 & 3 & 00 & 0 & 2\end{array}$ 217. $319 \quad 1.5014 \quad 4 \quad 0$ 218. 223 1 $5 \quad 14 \quad 4 \quad 0$ 219. $104 \quad 1 \quad 0 \quad 14 \quad 4.0$ 220. $320 \quad 0 \quad 5 \quad 14 \quad 1 \quad 0$ 221. $224 \quad 1.314 \quad 4 \quad 2$ 222. $626 \quad 1 \quad 2.14 \quad 4 \quad 0$ 223. 225: $1 \begin{array}{llllll}14 & 14 & 0\end{array}$ 224. $226 \quad 1 \quad 5 \quad 14 \quad 4 \quad 0$ 225. $831 \quad 1 \quad 6 \quad 14 \quad 4 \quad 2$ 226. $227 \quad 1 \quad 1 \quad 14 \quad 4.2$ 227. $529 \quad 1 \quad 5 \quad 00 \quad 4 \quad 0$ 228. $530 \quad 1 \quad 5 \quad 00 \quad 4 \quad 0$ 229. $832 \quad 1 \quad 6 \quad 00 \quad 1 \quad 2$ 230. $112 \quad 1 \quad 5 \quad 00 \quad 4 \quad 0$ 231. $422 \quad 1.400 \quad 1 \quad 3$ 232. $\begin{array}{lllllll} & 922 & 1 & 5 & 00 & 4 & 0\end{array}$ 233. $\begin{array}{lllllll}531 & 1 & 5 & 15 & 4 & 2\end{array}$ 234. $627 \quad 0 \quad 0 \quad 15 \quad 3 \quad 2$ 235. $\begin{array}{lllllll}728 & 1 & 6 & 15 & 0 & 1\end{array}$ 236. $228 \quad 1 \quad 3 \quad 15 \quad 3 \quad 0$ 237. $423 \quad 0 \quad 6 \quad 15 \quad 2 \quad 2$ 238. $532 \quad 0 \quad 6 \quad 15 \quad 1 \quad 2$ 239. $321 \quad 1 \quad 4 \quad 00 \quad 4 \quad 3$ 240. $729 \quad 1 \quad 0 \quad 00 \quad 4 \quad 2$ 241. $923 \quad 1 \quad 3 \quad 00 \quad 1 \quad 3$ 242. $628 \quad 1 \quad 0 \quad 00 \quad 2 \quad 3$
I. II. III. IV. V. VI. 252. $323 \quad 0 \quad 0 \quad 00 \quad 4 \quad 0$ 253. $629 \quad 1 \quad 2 \quad 00 \quad 4 \quad 3$ 254. $9331 \begin{array}{lllll} & 0 & 1 & 3\end{array}$ 255. $731 \quad 1 \quad 3 \quad 00 \quad 1 \quad 3$ 256. $231.1 \quad 6 \quad 00 \quad 2 \quad 0$ 257. 732 1. $6.00 \quad 4 \quad 3$ 258. $324 \quad 1 \quad 1 \quad 00 \quad 4 \quad 0$ 259. $630 \quad 1 \quad 0 \quad 00 \quad 4 \quad 0$ 260. $834 \quad 0 \quad 6 \quad 00 \quad 3 \quad 0$ 261. $425 \quad 1.400 \quad 4 \quad 3$ 262. $926 \quad 1 \quad 1 \quad 00 \quad 4 \quad 0$ 263. $232000016 \quad 4 \quad 0$ 264. 927 1 5 265. $631 \quad 1 \quad 5 \quad 16 \quad 4 \quad 0$ 266. 426 1 5 16 20 267. $928 \quad 1 \quad 0 \quad 16 \quad 0 \quad 0$ 268. $325 \quad 1 \quad 3 \quad 16 \quad 4 \quad 3$ 269. $326 \quad 1 \quad 3 \quad 16 \quad 0 \quad 2$ 270. $427 \quad 1 \quad 0 \quad 16 \quad 1 \quad 2$ 271. $428 \quad 1 \quad 1 \quad 16 \quad 4 \quad 0$ 273. $429 \quad 0 \quad 3 \quad 16 \quad 1 \quad 3$ 274. $733 \quad 0 \quad 5 \quad 16 \quad 4 \quad 0$ 275. 327 1 5 00 4 276. $734 \quad 1 \quad 0 \quad 00 \quad 4 \quad 3$ 277. 233 1 6 279. $430 \quad 1 \quad 0 \quad 17 \quad 4 \quad 0$
I. II. III. IV. V. VI. 280. $\begin{array}{llllllllllllll}533 & 1 & 0 & 17 & 4 & 2 & 316 . & 537 & 1 & 6 & 00 & 4 & 0\end{array}$ 281. $534 \begin{array}{lllllllllllll} & 5 & 1 & 17 & 4 & 2 & 317 . & 934 & 0 & 6 & 00 & 1 & 3\end{array}$ 282. $6321 \begin{array}{llllllllllll} & 632 & 17 & 1 & 0 & 318 . & 107 & 1 & 6 & 00 & 4 & 2\end{array}$ 283. $431 \quad 1 \quad 0 \quad 00 \quad 4 \quad 0$ 284. $328 \quad 1 \quad 6 \quad 00 \quad 2 \quad 3$ 285. $735 \quad 1 \quad 5 \quad 18 \quad 4 \quad 2$ 286. $157 \quad 1 \quad 0 \quad 18 \quad 2 \quad 2$ 287. $432 \quad 1 . \quad 5 \quad 18 \quad 2.2$ 288. $\begin{array}{lllllll}736 & 1 & 5 & 18 & 4 & 2\end{array}$ 289. $929 \quad 1 \quad 3 \quad 18 \quad 4 \quad 2$ 291. $835 \quad 1 \quad 3 \quad 18 \quad 1 \quad 3$ 292. $234 \quad 1 \quad 2 \quad 18 \quad 4 \quad 2$ 293. $235 \quad 1 \quad 6 \quad 18 \quad 2 \quad 2$ 294. $236 \quad 1 \quad 1 \quad 18 \quad 4 \quad 2$ 295. 53511 296. $737 \quad 1 \quad 3 \quad 18 \quad 4 \quad 0$ 297. $\begin{array}{lllllll}738 & 1 & 3 & 18 & 4 & 2\end{array}$ 298. $633 \quad 1 \quad 1 \quad 18 \quad 4 \quad 2$ 299. $\begin{array}{lllllll}930 & 1 & 5 & 18 & 2 & 3\end{array}$ 300. $123 \quad 1 \quad 1 \quad 18 \quad 4 \quad 3$ 301. $931 \quad 1 \quad 5 \quad 18 \quad 4 \quad 2$ 302. $739 \quad 1 \quad 5 \quad 18 \quad 4 \quad 0$ 303. $634 \quad 1 \quad 1 \quad 18 \quad 4 \quad 3$ 304. $836 \quad 1 \quad 6 \quad 18 \quad 4 \quad 0$ 305. $237 \quad 0 \quad 4 \quad 18 \quad 3 \quad 3$ 306. $329 \quad 1 \quad 1 \quad 18 \quad 4 \quad 0$ 307. $536 \quad 1 \quad 4 \quad 18 \quad 4 \quad 3$ 308. $837 \quad 1 \quad 1 \quad 18 \quad 4 \quad 3$ 309. $\begin{array}{lllllll}330 & 1 & 5 & 18 & 4 & 2\end{array}$ 310. $238 \quad 0 \quad 6 \quad 00 \quad 4 \quad 2$ 311. $932 \quad 1 \quad 2 \quad 00 \quad 4 \quad 3$ 312. $140 \quad 1 \quad 6 \quad 00 \quad 4$ 313. $635 \quad 1 \quad 5 \quad 00 \quad 4 \quad 0$ 314. $\begin{array}{lllllll}933 & 1 & 5 & 00 & 4 & 0\end{array}$ 315. $\begin{array}{llllllllllllll}239 & 1 & 1 & 00 & 4 & 3 & 350 . & 743 & 0 & 1 & 19 & 4 & 0\end{array}$
I. II. III. IV. V.。VI.
351. $242 \begin{array}{lllllllllllll} & 0 & 5 & 19 & 4 & 0 & 384 . & 749 & 1 & 5 & 00 & 3 & 3\end{array}$ 352. $9390 \quad 5 \quad 19 \quad 0 \quad 3 \quad 385$. 341 353. $744 \quad 0 \quad 0 \quad 19 \quad 4 \quad 0 \quad 386 . \quad 543$
 355. $754540019 \quad 4 \quad 0 \quad 388 . \quad 441$ 356. 746006 357. 106 358. 1460 359. $540 \begin{array}{lllllllllllll} & 1 & 1 & 19 & 2 & 0 & 392 \text {. } & 147 & 1 & 0 & 00 & 4 & 0\end{array}$ 360. $940 \begin{array}{llllllllllll} & 5 & 50 & 0 & 2 & 393 . & 944 & 1 & 3 & 00 & 4 & 0\end{array}$ 361. $2431 \begin{array}{llllllllllll} & 0 & 0 & 4 & 4 & 3 & 394 . & 841 & 0 & 6 & 00 & 4 \\ 2\end{array}$ 362. $641 \begin{array}{lllllllllllll} & 641 & 3 & 00 & 4 & 3 & 395 . & 842 & 1 & 3 & 00 & 1 & 3\end{array}$ 363. $440 \begin{array}{lllllllllllll} & 1 & 0 & 20 & 4 & 0 & 396 & 644 & 1 & 2 & 00 & 4 & 2\end{array}$
 365. $244 \begin{array}{lllllllllllll} & 1 & 1 & 19 & 4 & 3 & 398 . & 844 & 1 & 3 & 00 & 4 & 3\end{array}$ 366. $3341 \begin{array}{llllllllllll} & 1 & 0 & 20 & 4 & 0 & 399 . & 544 & 1 & 4 & 00 & 1\end{array} \quad 3$ 367. $941 \quad 1 \quad 5 \quad 20 \quad 4 \quad 3 \quad 400$. 342 1 $\begin{array}{llllllll} & 5 & 00 & 3 & 3\end{array}$
 369. 336 370. $9421 \begin{array}{llllllllllll} & 1 & 20 & 0 & 0 & 404 . & 343 & 1 & 5 & 23 & 4 & 0\end{array}$ 371. $747 \begin{array}{llllllllllll} & 1 & 5 & 00 & 4 & 2 & 405 . & 645 & 0 & 5 & 23 & 4\end{array} 0$
 373. 642 I 374. 338 1 $50 \begin{array}{lllllllllll} & 21 & 4 & 2 & 408 . & 250 & 1 & 3 & 23 & 4 & 2\end{array}$ 375. $3390 \begin{array}{llllllllllll} & 5 & 21 & 1 & 2 & 409 . & 121 & 1 & 0 & 23 & 4 & 0\end{array}$ 376. 94300 377. 542420 378. 152.0 379. $340 \begin{array}{lllllllllllll} & 1 & 5 & 00 & 4 & 2 & 413 . & 545 & 1 & 5 & 23 & 4 & 2\end{array}$ 380. 2451
 382. $2471 \begin{array}{lllllllllll}2 & 4 & 00 & 2 & 2 & 416 . & 1 & 0 & 00 & 4 & 2\end{array}$ 383. $\begin{array}{llllllllllllll}748 & 1 & 4 & 00 & 4 & 3 & 417 . & 105 & 1 & 4 & 00 & 4 & 2\end{array}$
I. II. III. IV. V. VI.
 419. $2520 \begin{array}{llllllllllll} & 0 & 00 & 3 & 2 & 464 . & 551 & 1 & 5 & 27 & 4 & 0\end{array}$

 422. $7510 \begin{array}{llllllllllll} & 0 & 00 & 4 & 0 & 467 . & 351 & 1 & 5 & 27 & 1 & 3\end{array}$ $\begin{array}{llllllllllllll}\text { 423. } & 254 & 0 & 3 & 24 & 4 & 0 & 468 . & 257 & 1 & 0 & 27 & 4 & 2 \\ 424 & 847 & 0 & 5 & 24 & 4 & 0 & 469 & 352 & 1 & 3 & 27 & 4 & 2\end{array}$ 425. $345 \quad 1 \quad 5 \quad 24 \quad 1 \quad 0 \quad 470 . ~ 950 \quad 1 \quad 6$ 426. $84800 \quad 0 \quad 24 \quad 1 \quad 2 \quad 471 . \quad 650 \quad 1 \quad 5 \quad 27$ 427. $647.0 \begin{array}{llllllllllll} & 0 & 24 & 4 & 2 & 472 & 139 & 1 & 3 & 27 & 4 & 3\end{array}$ 428. 14800
 430. $444 \quad 1 \quad 3 \quad 24.4 \begin{array}{llllllllll} & 4 & 476 & 122 & 1 & 2 & 27 & 4 & 3\end{array}$ 431. 7520 432. 3460 433. $945 \begin{array}{lllllllllllll} & 1 & 0 & 25 & 0 & 0 & 479 . & 138 & 1 & 6 & 27 & 4 & 3\end{array}$ 434. 25050
 447. 85010400
 $\begin{array}{llllllllllllll}\text { 449. } & 547 & 1 & 6 & 00 & 2 & 2 & 484 . & 555 & 1 & 6 & 27 & 4 & 2 \\ \text { 450. } & 256 & 1 & 5 & 00 & 4 & 0 & 486 . & 449 & 1 & 5 & 27 & & 2\end{array}$ $\begin{array}{llllllllllllll}\text { 451. } & 349 & 1 & 6 & 00 & 2 & 0 & 487 . & 852 & 1 & 5 & 06 & 4 & 2 \\ \text { 452. } & 648 & 1 & 6 & 00 & 1 & 3 & 488 . & 354 & 1 & 0 & 00 & 4 & 3 \\ \text { 453. } & 548 & 1 & 4 & 00 & 2 & 3 & 489 . & 754 & 1 & 4 & 00 & 4 & 2 \\ \text { 454. } & 851 & 1 & 5 & 00 & 2 & 2 & 490 . & 853 & 0 & 4 & 00 & 0 & 3 \\ \text { 455. } & 446 & 1 & 0 & 00 & 4 & 0 & 491 . & 355 & 0 & 5 & 00 & 2 & 2\end{array}$ 456. $949 \quad 1: \begin{array}{llllllllllll} & 0 & 00 & 4 & 3 & 492 & 652 & 1 & 1 & 00 & 1 & 2\end{array}$ 457. $\begin{array}{llllllllllllll}549 & 1 & 6 & 26 & 2 & 3 & 493 . & 854 & 0 & 1 & 00 & 4 & 0\end{array}$ 458. $94700 \quad 0 \quad 26 \quad 4 \quad 0 \quad$ 494. $450 \quad 1 \quad 6 \quad 00$ 459. $\begin{array}{llllllllllllll}550 & 0 & 0 & 26 & 2 & 0 & 495 . & 451 & 1 & 6 & 00 & 1 & 0\end{array}$ 460. $130 \quad 1 \quad 6 \quad 00 \quad 4 \quad 3 \quad 496 . \quad 556 \quad 1 \quad 4 \quad 00$ 461. $649 \quad 1 \quad 4 \quad 00 \quad 4 \quad 3 \quad 497 . \quad 119 \quad 1 \quad 3 \quad 00 ~ 4 ~ 3$ 462. $\left.\begin{array}{lllllllllllll} & 948 & 0 & 6 & 00 & 4 & 2 & 498 & 557 & 1 & 1 & 00 & 1\end{array}\right) 3$


N<br>VITA<br>John Wesley Talbott<br>Candidate for the Degree of<br>Doctor of Education

Thesis: AN ANALYSIS OF RESPONSE RATES TO A MAILED QUESTIONNAIRE
Major Field: Vocational-Technical and Career Education
Biographical:
Personal Data: Born at Tonkawa, Oklahoma, March 7, 1929, the son of Marvel and Merle Talbott.

Education: Graduated from Yale High School in 1948; received the Bachelor of Science degree from Oklahoma State University in 1958, with a major in Trade and Industrial Education and a minor in electronics; received a Master of Science degree from Oklahoma State University in 1964 with a major in Trade and Industrial Education; completed the requirements for the Doctor of Education degree from Oklahoma State University in May, 1977.

Professional Experience: Employed at Shawnee High School, Shawnee, Oklahoma, from 1958 to 1961 as electronics instructor; at Broken Arrow, Oklahoma, as electronics instructor from 1961 to 1966. Employed by State Department of Vocational and Technical Education from 1966 to 1968 as Assistant State Supervisor of Technical Education; from 1968-1973 as State Supervisor of Technical Education and Coordinator of PostSecondary Programs; from 1973 to 1975 as Assistant Coordinator of Area Vocational-Technical Schools and Coordinator of Adult Education; and from 1975 until present as Area Coordinator for Area Vocational-Technical Schools and Coordinator of Adult Education. Served in the U.S. Navy from 1950 to 1954.

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