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ABSTRACT

This study investigated the attitudes of secondary school guidance counselors toward trade and industrial education, in relation to individual characteristics, experience, knowledge about the program, and type of program in operation. Usable responses on the School Counselor's Inventory for Vocational Trade and Industrial Education were made by 217 of 307 counselors listed in the Wisconsin Official School Directory. Significantly better attitudes were found among older counselors, whereas knowledge was greatest among counselors who were English majors or had at least 6 years experience with their present employers. Both attitudes and knowledge were higher among counselors who lived in communities offering evening programs in trade and industrial education. The report recommends that courses in vocational areas be incorporated into graduate education and inservice programs for counselors. (BH)

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Counselors View Trade and Industrial Education in Wisconsin

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Acknowledgments

The writer is deeply indebted to all the counselors who cooperated by providing the needed data for this investigation. The Board of Regents of Wisconsin State Universities are also acknowledged for their financial aid which made this study possible.

Neal W. Prichard

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Chapter I

Introduction to the Study

Background

The high school drop out is of great concern in America today. A number of reasons have been stated for this alarming number of youths who have not completed their education in the secondary schools. One reason felt to be of great importance is the narrowness of secondary school curriculum offerings, thus not allowing sufficient latitude for the individual to satisfy his needs, interests, and aptitudes. Even more tragic than the limited curriculum, however, is student unawareness of a broad curriculum offering available to them.

This limitation of the students' knowledge of curriculum offerings should not happen today, especially since the passing of the National Defense Education Act. Educators are quite concerned about the teacher's knowledge of guidance and even more concerned about the qualifications of the teacher who has been prepared for work as a counselor in the guidance program. Much of the concern about counselors is due to a tremendous number of students they have to counsel, thus allowing insufficient time to really work with the students as they should. Another problem related to this is the depth and breadth of the counselor's knowledge of the individual's background and the curriculum offerings available for the student. Since counselors usually graduate from college, they have an understanding of the high school requirements needed for a student to enter college and the background that would aid the student at this venture. But not all youth graduate from high school, nor do those

who graduate from high school enter college. Thus, it is imperative that students receive guidance other than that involving preparation for college.

Statement of the Problem

The problem, stated broadly, was to investigate the attitudes of secondary school guidance counselors toward vocational, trade and industrial education, and to analyze these attitude scores in relation to selected personal characteristics. In addition, the knowledge of trade and industrial education possessed by counselors was compared with the same personal background characteristics.

Stated more specifically, answers were sought for the following questions:

1. What personal characteristic appears to have the greatest influence on our relationship with counselors' attitudes toward trade and industrial education.

2. What personal characteristic appears to have the best relationship with counselors' knowledge of the curriculum?

3. Does there appear to be any relationship between years of experience as a counselor and attitude toward vocational, trade and industrial education.

4. Is there any relationship between years of experience as a counselor and knowledge possessed about the program?

5. Counselors in what age group appear to have the most favorable attitudes toward and greatest knowledge of trade and industrial education?

6. Does a relationship exist between the counselors' attitude and knowedge scores with their educational background?

7. Does the counselor with a background of work experience, by type and duration, have a more favorable attitude toward vocational, trade and industrial education?

8. Do counselors living in a community where there is a day or an evening trade and industrial education program in operation have more favorable attitudes and possess more knowledge of the curriculum?

Significance of the Problem

Counselors are faced with the responsibility of guiding youth into educational program choices that will be most beneficial in preparing them for worthy citizenship. A critical part of this worthy citizenship is gainful employment.

Wisconsin has provided a vocational and adult system that has made tremendous strides since the enactment of the 1911 law creating the state system of vocational schools. Enrollment has advanced to 188,000 students during the school year 1965-66. It is necessary to point out that many of these were part-time high school students.

It is alarming to note that the 59,132 students in the nineth grade in 1957 had dwindled to 49,326 students in twelfth grade. A total of 9,806 students had dropped from school with no real preparation for employment (Governor's Committee on Children and Youth). Hopefully, many of these dropouts would later enroll in the state system of vocational school.

The role of the counseling system was examined closely by Conant. The recommendations of Conant (1959, page 45) include:

> The framework in which the counselor operates depends upon school policy. For example, the policy of the school in regard to the vocational programs should be such as to insure that these programs are not used as dumping grounds for those of low academic ability. Furthermore, it should be school policy that the counselor arrange a meaningful sequence of courses in the elective programs of all pupils. In a comprehensive high school of the type I am considering a meaningful sequence for a majority of the students would be a series of courses leading to the development of marketable skills.

It is obvious that there is a need to improve the holding power of our schools. This may result from better guidance of the student into a program that will benefit him for employability and also

benefit society. Counselors, responsible for the curriculum choice of students must have a thorough knowledge of the various curriculum offerings. Thus it was essential to ascertain the knowledge and attitude of these individuals toward the program of vocational trade and industrial education.

Definitions and Terms

Attitude. "A readiness to react toward or against some situation, person, or thing, in a particular manner" (Good, 1959, p. 48).

Counselor. "One who assists persons in life planning or in the solution of problems, especially as they relate to social, educational, and vocational situations; assistance being rendered through individual or group conferences during which the problems are analyzed and constructive proposals for their solution suggested; ordinarily the counselor is responsible for helping teachers solve their own pupil-personnel problems.

Counselor, Class. One whose counseling is limited to the members of one class, such as the Junior Class" (Good, 1959, p. 105).

Counselor's Personal Characteristics. The counselor's age, years of employment by present board, years of employment by previous boards, formal education, length of employment as a teacher, undergraduate major, work experience other than education, and years at this experience.

IBM. International Business Machines.

T & I. Vocational trade and industrial education.

Organization of the Report

Chapter I introduces the problem, the significance of the problem, and defines terms requiring clarification. A review of pertinent literature is presented in Chapter II. Chapter III includes the procedure of the investigation with the instruments used, the selection of the sample, collection of the data, and the summarizing of the data. Chapter IV presents the characteristics of the sample, statistical treatment of the data, and an analysis of personal data with the attitude, knowledge, and summary scores. The summary and conclusions are contained in Chapter V.

Chapter II

Review of Literature

Introduction

This chapter is divided into three major sections. The first section discusses the related literature in trade and industrial education. Section two presents the pertinent literature about counselors that has a relationship with the problem. The final section includes information about the student and his readiness for vocational guidance.

Trade and Industrial Education

There appears to be a dearth of attitudinal research in the curriculum area of vocational trade and industrial education. Only three studies could be considered applicable to the attitudes of persons toward trade and industrial education or toward the blue collar occupations. Each has been summarized briefly.

A study by Mortimer (1956) involved attitudes of educators and students in Utah toward manual labor an toward manual workers. The attitude scores of administrators and counselors were ranked according to the degree of favor. The superintendents were ranked the highest, the principals second, and the counselors the lowest.

An investigation of the attitudes of school board members and school administrators toward vocational trade and industrial education was completed by Schaefer (1962). The results indicated that these people had significantly more favorable attitudes if they lived in communities where a trade and industrial education program was in operation

contrasted with their associates who lived in communities where no such program was in operation.

The third study that is applicable was completed by Prichard (1962). This involved selected personal background factors that had a relationship with the attitudes of school board members and school administrators toward vocational trade and industrial education. Findings indicated that a strong relationship existed between knowledge of the program and attitude toward the program.

Prichard also found that if a school board member had heard about trade and industrial education from a counselor, the board member had a changed attitude toward the program so the counselor apparently had an influence on board members.

Counselors

Certification requirements have varied greatly from state to state, although the National Defense Education Act has helped provide some similarity. Several studies (Woellner and Wood, 1950; Kremen, 1951; and Harmon and Arnold, 1960) indicated courses in the following areas:

a. Fundamentals of guidance programs
b. Occupational information
c. Counseling
d. Tests and measurements
e. Analysis of the individual
f. Mental hygiene
g. Related fields such as psychology, sociology, and education.

One study (Woellner and Wood, 1950) found that two of the fifteen states they surveyed required a course in vocational education. No mention of vocational education appeared in any of the other investigations.

A more recent investigation obtained counselors' and counselor trainers' attitudes toward certification requirements (Lloyd, 1962). Findings indicated that adult work experience in addition to teaching should be required and that the academic requirement should be in broad general areas with specific courses. The broad areas include:

a. Counseling techniques
b. Principles of guidance
c. Education and occupational information
d. Analysis of the individual
e. Supervised practice
f. Organization and administration of guidance program
g. Group procedures
h. Research and evaluation procedures
i. Human growth and development.

The nearest area on the above list to vocational education was assumed by the writer to be educational and occupational information.

The background of those involved at the counselor preparation institution and the counselors themselves would greatly influence the courses and practices followed by these people. Summers and Davis (1949) found that most counselors were undergraduate majors in social science, English, speech, and journalism. It was interesting to note that 88 of the 406 respondents indicated some teaching experience in vocational education but none of them indicated vocational trade and industrial education.

In a study of the services provided by counselors, Cassallo (1962) found that the most frequently performed duties of the counselors

involved the serving of the pupils needs." These needs were primarily in the areas of higher education, special training, and occupational information. Because of great deficiencies found in vocational guidance and the uneven emphasis with more being placed on educational rather than vocational, Cassalla concluded that the guidance program does not serve the need for all students in most secondary schools.

Students Readiness for Guidance

Since the counselors are apparently de-emphasizing vocational guidance one might ask if this is because the students are not really ready for this guidance. Several studies have found that secondary boys are ready for this service (O'Hara and Tiedman, 1959; Cass and Tiedman, 1960; and Dipboye and Anderson, 1961). All of these investigations found that boys occupational values were formed by the ninth grade. Cass and Tiedman (1960) found also that interests were effective predictors of the selection of high school curriculum and aptitudes were not only poor predictors of choice of curriculum, but also were not even understood until the senior year of high school.

Summary

Only a few studies were found that dealt with attitudinal research in the curriculum area of trade and industrial education. Findings indicated that counselors did not have a very favorable attitude toward blue collar occupations and that a relationship existed between knowledge of the program of trade and industrial education and attitude toward the program.

Few states require counselors to take course work in vocational education and few vocational educators from trade and industrial

education go into counseling. The guidance program in secondary schools was found to greatly overemphasize educational guidance rather than vocational guidance. This was concluded to mean that the guidance program does not serve the needs for all students.

Students are apparently ready for guidance at the ninth grade although they do develop their interests further through-out high school. The interests of students in the ninth grade were found to be effective predictors of the selection of the high school curriculum.

Chapter III

Procedure of the Investigation

The Instruments

The instrument used to obtain the attitude and knowledge of the counselors was the "School Counselor's Inventory (SCI) for Vocational Trade and Industrial Education" (Appendix, page). This instrument was a modification of the "School Administrator's Inventory (SAI) for Vocational Trade and Industrial Education" that was developed and published by the Department of Industrial Education of The Pennsylvania State University. Permission was granted to make the necessary modifications on the title and biographical portion and to have the instrument printed provided the name of the original institution remained on the scale.

Part one of this scale was of the Likert summated rating type and was found to have a reliability of .97 using the Kuder-Richardson formula (Tate, 1955). Part two served as a knowledge scale and was also found to be reliable by computing the t statistic between the differences of percentages on every item of the scale. A jury had taken the instrument to establish the percentages.

Selection of the Sample

The population of the sample was selected from the Wisconsin Official School Directory (State Department of Public Instruction, 1963-64). Each individual in the book with the word guidance after his name was asked to participate in the investigation. A total number of 307 were included in the population.

Collection of Data

A letter of transmittal was prepared explaining the purpose of the study and asking for the counselors' cooperation (Appendix, page 39). This letter was sent along with a stamped, self-addressed envelope and the attitude scale.

Three weeks after the instruments were mailed, 53 percent of the counselors had returned their scales. A thank-you letter which was also a reminder letter was sent to all of the counselors. Again, each counselor received a stamped, self-addressed envelope and a copy of the scale. It was essential to send the complete mailing of the thank-you and the reminder letter because no names or communities were identified. One month later the last scale arrived which brought the number of respondents to 238 or 77 per cent.

Summarizing the Data

The instruments were hand scored (directions in Appendix, page 41), and a total number was recorded for the attitude score, the knowledge score, and the summary attitude score. These three scores were punched in an IBM card along with the biographical information from that counselor. Unfortunately, because the data were incomplete on some of the scales only 217 were found to be useable.

Chapter IV

Analysis of Data

Introduction

This chapter is divided into two divisions for analysis and discussion. Part one provides a general description of the population composing attitude, knowledge, and summary statement results. The second part includes an analysis of personal data with the attitude, knowledge and summary score.

Characteristics of the Sample

The personal characteristics of the sample varied as was expected. A somewhat typical counselor is described below for a better overview of the respondents:

a. A person who was between 30 and 39 years of age who had college work beyond the master's degree.

b. An English, science, or social science teacher who had less than 10 years of teaching experience, and who had served from one to three years as a counselor.

c. This person had some work experience in industry, one to three years, but had no formal preparation or courses in vocational education.

These characteristics were felt to be in agreement since a person of 30-39 years of age could have completed the education, and have had the years of experience as a teacher, counselor, and other work.

Statistical Treatment of the Data

Fisher's t statistic was used to compare the means of the numerous groupings. A FORTRAN (International Business Machines, 1961) FORmula TRANslating, program was prepared to total the score, compute the mean and standard deviation, and compute a t difference between two means. The data were analyzed with the computer located at Stout State University.

After preliminary analysis with the means and standard deviations, the t comparison between means was made by selecting the group with the highest mean and comparing the other groups with this one grouping. Data which fell below the .05 or .01 level of significance was not considered significant and was not included.

All statistical computations were carried out to three decimal places. Since the original attitude scores contained no more than three significant figures, the mean attitude scores and all others were limited to a total of three significant figures.

Overview of the Sample

A total of 217 scales of 238 received were found complete and useable. Most of these counselors perceived themselves as being favorable toward vocational trade and industrial education (Table 1, page 15). Their summary score indicated between somewhat favorable and very favorable on the single summary question that asked:

"In general, my attitude toward vocational trade and industrial education as an integral part of a public school curriculum is:

5 Very favorable

4 Somewhat favorable

3 Undecided or don't know

2 Somewhat unfavorable

1 Very unfavorable

The mean attitude score was found to be 268 and the mean knowledge score was 50.5 which did provide a general overview of the sample.

Table 1

Number, Mean Scores, and Standard Deviations (S. D.), for Attitude, Knowledge, and Summary Item of Counselors

Number	Attitude $\bar{X}$	S. D.	Knowledge $\bar{X}$	S. D.	Summary $\bar{X}$	S. D.
217	268	21	50.5	9	4.17	1.5

Community Program Offerings

The counselors living in communities that had an operational, evening program had the most favorable attitude and the greatest knowledge of trade and industrial education (Table 2, page 16). Counselors living in communities that had no program, neither day nor evening followed while those counselors living where there was both a day and an evening program operating had the least favorable score.

The counselors in the evening group did have a significantly higher attitude score than those in the day and evening program communities. It was also found that the same evening group had a singificantly higher knowledge score than those counselors living in communities where there was no program.

Table 2

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors in Communities with Day and Evening Programs, Evening Programs, and No Programs

Program	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
Day and evening	111	266	2.15*	50		4.19
Evening	63	273		53		4.25
No program	43	267		48	2.74**	4.00

t Comparisons made with "Evening group"
* Significant at the .05 level
** Significant at the .01 level

These findings were somewhat inconsistant when compared with those of Schaefer (1962) and Prichard (1962). Both reported that school board members and administrators living in communities offering trade and industrial education had significantly higher attitude and knowledge scores than their associates who lived in communities where there was no program. It should be noted, however, that in their studies the decision to offer or not to offer was that of the local community. Since the Wisconsin law provides that communities of 5,000 population have a local board and provide vocational education this was felt to be a factor in the results that were not consistant with those just noted. It is interesting to compare this with the results of Mortimer (1956) who found that counselors in Utah were not too favorable toward the blue collar occuaptions.

Analysis with Biographical Data

Each of the biographical items will be presented with an analysis of the findings concerning the attitude score, knowledge score, and the summary score. The items are in the same order as listed on the data collecting instrument.

Immediately following the description of the data, a short analysis has been included to hopefully interpret the meaning of the data.

Age of the Counselor. Counselors who were in the 50-59 year age grouping had the most favorable attitude and highest knowledge score concerning this curriculum offering. The 25-29 year counselors had the least favorable attitude and the lowest knowledge score (Table 3, page 17).

Table 3

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors by Age

Years	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
25-29	25	264		45	3.05**	4.0
30-39	80	267		49	2.12*	4.1
40-49	65	269		52		4.3
50-59	37	270.8		53		4.1
60+	9	270.6		50		4.2

t Comparisons made with "50-59"
* Significant at the .05 level
** Significant at the .01 level

Significant differences were found between the high knowledge score of the 50-59 year old counselors, and the groupings of 25-29 year old counselors, and 30-39 year old counselors.

Apparently older counselors had gained knowledge and a more favorable attitude through their many years of experience in education. This could have been because they had more exposure to this curriculum and had seen a need for it.

Years Counselor Had Been at Present School. The counselors who had been at the school less than one year were found to have the most favorable attitude score, but the poorest knowledge score (Table 4, page 19). Those who had more than six years of experience had only a one point lower mean attitude score, but the highest knowledge score. The 4-6 year counselors at that school had the lowest attitude scores and an equal knowledge score with the 1-3 year group. The 4-6 year counselors at that school had the loswest attitude scores and an equal knowledge score with the 1-3 year group. The 4-6 year group did perceive themselves as having a rather favorable attitude on the summary item.

Table 4

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors by Years a Counselor at Present School

Years	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
0-1	34	273		48		4.5
1-3	73	266		50		3.9
4-6	55	264		50		4.2
6+	55	272		53	2.27*	4.3

t Comparisons made with "less than one year group"
* Significant at the .05 level

The counselors who had been at the school more than six years had a significantly higher knowledge score than the less than one year group. No other significant differences were found.

This item did not have a close relationship with the counselor's background. It did, however, relate closely with the previous question concerning the individual's age. It appeared logical that the older teachers would also have been at the same school longer thus having the most favorable attitude score and the highest knowledge score. The paradox was that the youngest group at the schools had the most favorable attitude score although they did have the lowest knowledge score. This was contrary to the findings of Prichard (1962) who found that a close relationship existed between knowledge and attitude toward vocational trade and industrial education.

Years of Previous Employment as a Counselor. The counselors who had from 16-20 years of previous experience were found to have the highest attitude score, highest knowledge score, and highest summary score, (Table 5, page 20). Those counselors who had from 11-15 years of experience had the lowest scores in all three categories.

Table 5

Number and Mean Scores for Attitude, Knowledge, Summary and t Difference by Years of Previous Employment as a Counselor

Years	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
None	112	268		50		4.3
1-5	66	270		51		4.1
6-10	21	268		52		4.2
11-15	5	255		46		3.8
16-20	5	280		54		4.4
21-55	7	260		50		4.3
31+	1	257		52		Omitted

t Comparisons made with 16-20 year group.

No significant differences were found between any of the groupings. It was interesting to note, however, that most of the counselors (112) did not have previous experience as a counselor.

Academic Attainment. The highest mean attitude score was obtained by those who had completed master's degrees (Table 6, page 21). Those who had completed a bachelor's degree plus some additional credits were found to have the poorest attitude score. No significant differences

were found in any of the comparisons with the attitude, knowledge, or summary scores.

Table 6

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences by Academic Attainment

Level	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
4+	20	264		50		3.9
Masters	66	270		49		4.2
Masters+	129	268		51		4.2
Doctors	2	267		54		2.5

t Comparison made with masters group

It was interesting to note the knowledge scores of the two who had completed doctor's degrees were higher than those in the other groups. Evidently they had been exposed to some information about trade and industrial education but it did not raise the attitude score. These two people also perceived themselves as having an average score on the summary item which was in agreement with their total attitude score.

Length of Employment as a Teacher. Teachers who had taught between 26 and 30 years had the most favorable mean attitude scores (Table 7, page 22). Those who had between 21 and 25 years of teaching experience had the least favorable attitude scores. No significant differences existed between groups.

Table 7

Number and Mean Scores for Attitude, Knowledge, Summary, and t Differences for Years of Employment as a Teacher

Years	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
1-5	51	268		49		4.2
6-10	50	268		50		3.9
11-15	44	268		52		4.5
16-20	25	268		50		3.6
21-25	22	263		50		4.3
26-30	9	274		51		4.3
31+	16	273		52		4.8

t Comparison made with 26-30 year group

Generally, the mean attitude score, knowledge score, and summary score rose with the increase in number of years of teaching experience. The sample did have a wide distribution of years of experience with some reporting in every category from one year to over 31 years.

Undergraduate Major. The counselors who majored in English had the most favorable attitude score while the industrial arts majors had the highest knowledge score (Table 8, page 23). There were several exceptions to this with the one art major and the one home economics major that were not considered because of the limited sample in the undergraduate major.

The four music majors had the lowest mean attitude score, but those listing the major as "other" had the lowest knowledge score.

The English majors did have a significantly higher attitude score than those who listed "other" as their undergraduate major.

Table 8

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors, by Undergraduate Major

Major	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
Art	1	279		50		4.0
English	51	274		50		4.1
Home Economics	1	265		62		5.0
Industrial Arts	15	272		55		4.5
Mathematics	19	269		50		4.5
Music	4	254		54		4.5
Physical Education	29	267		48		4.2
Science	32	265		52		4.0
Social Science	41	267		51		4.1
Other	23	261*		47		4.0

t Comparisons made with "English"
* t = 3.07, significant at the .05 level

The writer thought the industrial arts majors would have had the most favorable attitude toward vocational trade and industrial education because of the commonalty in the body of knowledge, namely industry. The results with the English Majors having the highest mean attitude score was unexpected.

Work Experience Other than Education. The thirteen counselors who had work experience in retailing had the highest attitude score and summary score (Table 9, page 24). Agricultural work experience, listed by two counselors was the grouping with the lowest attitude score. No significant differences existed.

Table 9

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors by Work Experience

Experience	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
None	12	265		46		3.7
Industry	121	269		52		4.1
Business	58	266		50		4.3
Agriculture	2	251		48		4.5
Retailing	13	274		52		4.6
Sales	10	270		45		4.3
Commercial	1	261		45		4.0

t Comparisons made with retailing

It was thought that those who had work experience in industry would have had the highest scores because of the relationship between industry and trade and industrial education. Those in retailing may have had the high scores because of exposure to some industry in their working or because of their knowledge and understanding of the vocational program of distributive education.

Length of Employment in Other Occupations. The highest attitude score was received by those who had worked from four to six years in occupations other than education (Table 10, page 25). The group who had worked 10-12 years had the lowest attitude score.

There was a significant difference between the summary score of the 4-6 year group and the 16+ year group with the 4-6 year group having the lower score.

Table 10

Number and Mean Scores for Attitude, Knowledge, Summary and t Differences for Counselors by Years of Work Experience in Employment other than Education

Years	Number	Attitude $\bar{X}$	t	Knowledge $\bar{X}$	t	Summary $\bar{X}$
None	16	269		51		4.0
1-3	101	267		49		4.3
4-6	69	270		50		3.9
7-9	15	268		54		4.5
10-12	8	264		49		4.1
13-15	1	274		65		5.0
16+	7	268		54		4.7*

t Comparisons made with 4-6 year group
*t 3.16 significant at the .05 level

It was interesting to note the wide variation of years of working experience with 16 indicating no work experience other than education and seven with more than 16 years of work experience. Another noteable observation was the high summary score of the 16+ year group.

This group perceived themselves as having a very favorable attitude yet they were not the highest score group.

Completion of Selected Courses. The four counselors who had completed some course work in trade and industrial education had the highest attitude, knowledge, and summary score (Table 11, page 26). The five who had completed course work in home economics had the lowest attitude score.

Several significant differences did occur. The group who had a course in trade and industry did have a significantly higher knowledge score than those who had not one of the courses listed. Also, there were three differences in the summary scores when compared to the trade and industry group.

Table 11

Number and Mean Score for Attitude, Knowledge, Summary, and t Differences for Counselors Who Completed Selected Courses

Course	Number	Attitude $\bar{X}$	Knowledge $\bar{X}$	t	Summary $\bar{X}$	t
Vocational Ag.	10	262	45		4.2	
Trade & Industry	4	276	58		5.0	
Distributive Ed.	3	272	50		4.7	
Survey of Voc. Ed.	50	270	52		4.2*	4.38
Industrial Arts	30	268	50		3.9*	3.64
Home Economics	5	258	49		3.6	
None	105	268	50	2.93*	4.2**	5.23

t Comparisons made with "Trade & Industry group"
* Significant at the .05 level
** Significant at the .01 level

It was thought that those who had completed a course in trade and industry would be significantly higher in attitude as well as knowledge. The small size of the group in trade and industry did have some effect on this. The writer was somewhat surprised to find approximately half of the counselors with no formal classroom preparation in any area of vocational education.

Chapter V

Summary and Conclusions

Introduction

Vocational education has been receiving renewed emphasis during the past few years. This has been a result largely of the new federal assistance in providing more and broader opportunities.

A function of high school counselors is to aid students in their curriculum program selection. Another function is concerned with vocational guidance for the secondary school students. These combined functions could and probably should have an impact on the life and career of the student when he graduates from high school

Statement of the Problem

The problem, stated broadly, was to investigate the attitudes of secondary school guidance counselors toward vocational trade and industrial education and to analyze these attitude scores in relation to selected personal characteristics. In addition, the knowledge of trade and industrial education possessed by counselors was compared with the same background characteristics.

Stated more specifically, answers were sought for the following questions:

1. What personal characteristic appears to have the greatest influence on, or relationship with, counselors' attitudes toward trade and industrial education?
2. What personal charactertistic appears to have the best relationship with counselors' knowledge of the curriculum?
3. Does there appear to be any relationship between years of experience as a counselor and attitude toward vocational trade and industrial education?

4. Is there any relationship between years of experience as a counselor and knowledge possessed about the program?

5. Counselors in what age group appear to have the most favorable attitude toward and greatest knowledge of trade and industrial education?

6. Does a relationship exist between the counselors' attitude and knowledge scores with their educational background?

7. Does the counselor with a background of work experience, by type and duration, have a more favorable attitude toward vocational trade and industrial education?

8. Do counselors living in a community where there is a day or an evening trade and industrial education program in operation have more favorable attitudes and possess more knowledge of the curriculum?

Significance of the Problem

Counselors are faced with the responsibility of guiding y[illegible]nto educational program choices that will be most beneficial in preparing them for worthy citizenship. A critical part of this worthy citizenship is gainful employment.

Wisconsin has provided a vocational and adult system that has made tremendous strides since the enactment of the 1911 law creating the state system of vocational schools. Enrollment has advanced to 188,000 students during the school year 1965-66. It is necessary to point out that many of these were part-time and post high school students.

It is alarming to note that the 59,132 students who were in ninth grade in 1957 had dwindled to 49,326 students in twelfth gra[illegible]. A total of 9,806 students had dropped from school with no real [illegible]peration for employment (Governor's Committee on Children and Youth). Hopefully, many of these dropouts would later enroll in the state syste[illegible] vocational schools.

The role of the counseling system was examined closely by Conant. The recommendations of Conant (1959, page 45) include:

> The framework in which the counselor operates depends upon school policy. For example, the policy of the school in regard to the vocational programs should be such as to insure that these programs are not used as dumping grounds for those of low academic ability. Furthermore, it should be school policy that the counselor arrange a meaningful sequence of courses in the elective programs of all the pupils. In a comprehensive high school of the type I am considering, a meaningful sequence for a majority of the students would be a series of courses leading to the development of marketable skills.

It is obvious that there is a need to improve the holding power of our schools. This may result from better guidance of the student into a program that will benefit him for employability and also benefit society. Counselors, responsible for the curriculum choice of students, must have a thorough knowledge of the various curriculum offerings. Thus, it was essential to ascertain the knowledge and attitude of these individuals toward the program of vocational trade and industrial education.

Findings from the Literature

Only a few studies were found that dealt with attitudinal research in the curriculum area of trade and industrial education. Findings indicated that counselors did not have a very favorable attitude toward blue collar occupations and that a relationship existed between knowledge of the program of trade and industrial education and attitude toward the program.

Few states require counselors to take course work in vocational education and few vocational educators from trade and industrial education go into counseling. The guidance program in secondary

schools was found to greatly overemphasize educational guidance rather than vocational guidance. This was concluded to mean that the guidance program does not serve the needs for all students.

Students are apparently ready for guidance at the ninth grade although they do develop their interests further throughout high school. The interests of students in the ninth grade were found to be effective predictors of the selection of high school curriculum.

Procedure of the Investigation

The Instrument. The instrument used to obtain the attitude and knowledge of the counselors was the "School Counselor's Inventory (SCI) for Vocational Trade and Industrial Education." This instrument was a modification of the "School Administrator's Inventory (SAI) for Trade and Industrial Education" published by the Department of Industrial Education of the Pennsylvania State University.

Selection of the Sample. The population of the sample was selected from the Wisconsin Official School Directory (State Department of Public Instruction, 1963-64). Each individual in the book with the word guidance after his name was asked to participate in the investigation. A total number of 307 were included in the population.

Collection of the Data. A letter of transmittal was prepared explaining the purpose of the study and asking for the counselors' cooperation. This letter was sent along with a stamped, self-addressed envelope and the attitude scale.

A thank-you letter which was also a reminder letter was sent to all the counselors three weeks after the first letter. A total of 236 or 77 per cent of the sample responded within one month of the second letter.

Analysis of Data. The instruments were hand scored and a total number was recorded for the attitude score, the knowledge score, and the summary attitude score. These three scores were punched in an IBM card along with the biographical information from that counselor. Unfortunately, because the data were incomplete on some of the scales only 217 were found to be useable.

Summary of Findings

Each of the questions stated in the problem was answered concerning the knowledge and attitude of counselors toward trade and industrial education.

1. What personal characteristic appears to have the greatest influence on, or relationship with, counselors' attitudes toward trade and industrial education?

   Counselors who had been employed from 16-20 years as a counselor were found to have the highest mean attitude score of all the groupings and all of the various characteristics investigated. Since age and experience are closely related, these results are consistant with those of Prichard (1962).

2. What personal characteristic appears to have the best relationship with counselors' knowledge of the curriculum?

   Those who had completed a course in trade and industrial education were found to have the highest knowledge score as was expected.

3. Does there appear to be any relationship between years of experience as a counselor and attitude toward vocational trade and industrial education?

   No significant differences were found between the various experience groupings.

4. Is there any relationship between years of experience as a counselor and knowledge possessed about the program?

There were no significant differences discovered. It was interesting to note, however, that the knowledge score distribution was similar to the attitude score distribution.

5. Counselors in what age group appear to have the most favorable attitudes toward and greatest knowledge of trade and industrial education?

The 50-59 year old counselors were found to have the most favorable attitude score and the highest knowledge score. Their knowledge score was significantly higher than the 25-29 year and the 30-39 year groups.

6. Does a relationship exist between the counselors' attitude and knowledge scores with their educational background?

The counselors who did not have master's degrees had the lowest attitude score, however, no significant differences existed. The two with doctor's degrees had the highest attitude score, but it was not significantly higher than the others.

Generally, the mean attitude score, knowledge score, and summary score rose with the number of years of teaching experience.

The counselors who majored in English had the most favorable mean attitude score while the industrial arts majors had the highest mean knowledge score. The English majors did have a significantly higher attitude score than those who listed "other" as their undergraduate major.

7. Does the counselor with a background of work experience, by type and duration, have a more favorable attitude toward vocational, trade, and industrial education?

   No significant differences were found between groups who had work experience in the several categories and those who did not have any work experience. A significant difference was found between the summary score of the 4-6 year work experience group and the 16+ years group, with the 4-6 year group having the lower score.

8. Do counselors living in a community where there is a day or evening trade and industrial education program in operation have more favorable attitudes and possess more knowledge of the curriculum?

   The counselors living in communities that had an evening program had a significantly higher attitude score than those who lived in communities with a day and an evening program. Also, the evening group had a significantly higher knowledge score than those counselors living in communities where there was no program.

Summary of Items Indicating Significant Differences

Significant differences were found on the items listed below:

1. Older counselors had more favorable attitudes than younger counselors.
2. Counselors who had been employed six or more years by their present board had more knowledge than those serving their first year.
3. Counselors whose undergraduate major in English was higher than those in the "other" classification.
4. A course in trade and industrial education did successfully change the attitude and knowledge of counselors.
5. Counselors living in communities with an evening program had the most favorable attitude and knowledge scores.

Summary of Items Indicating No Significant Differences

No significant differences were found in any of the items listed below.

1. Years of formal education
2. Years of teaching experience
3. Work experience other than education
4. Years of previous employment as a counselor.

Conclusions

Based upon the findings of their investigation, two conclusions appeared to be evident if students are to have good vocational guidance from counselors.

1. Every graduate student pursuing a degree in guidance should complete a course in the principles of trade and industrial education and the other areas of vocational education.

2. Those counselors presently employed should receive an in-service course or some other means to obtain the principles of trade and industrial education as well as the remaining areas of vocational education.

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Appendix

Instrument Utilized for Data Collection

Letter of Transmittal

Follow-Up Letter

Scoring SCI Attitude Scales

Department of Industrial Education
The Pennsylvania State University
University Park, Pennsylvania

School Counselor's Inventory (SCI)
Vocational Trade and Industrial Education

Part I

● **DEFINITION: VOCATIONAL TRADE AND INDUSTRIAL EDUCATION** — public school instruction which is planned for the purpose of developing basic manipulative skills, safety judgment, technical knowledge, and related occupational information for the purpose of fitting young persons for initial employment in industrial occupations . . . In other words, this is NOT industrial arts, but education aimed to fit persons for successful employment in the semi-skilled or skilled trades, crafts, or occupations.

● **DIRECTIONS:** We would like to know how you FEEL about vocational trade and industrial education. We want you to answer each item as honestly as you can. We ask you NOT to write your name on these sheets for it is only your truthful answers that are important — it does not matter who gives the answers.

Please circle the response which corresponds the closest to your feeling about each item.

SA = Strongly Agree
A = Agree
U = Uncertain
D = Disagree
SD = Strongly Disagree

Do not take too much time in thinking about any particular item. Please do not leave any item out — there is no right or wrong answer — it is just how YOU feel about things. Other people may have different opinions.

Here is an example:

SA A U D (SD) I feel that vocational trade and industrial education should be included in the high school curriculum.

This person strongly disagrees with the item and thus feels that it definitey should not be in the school curriculum.

Put a circle around the answer which comes the closest to representing your feeling. Even if your exact feeling is not found in one of the choices, pick the one which comes the closest to your true feeling. Sometimes it will be hard to make up your mind, but do the best you can and do not leave any out.

SA	A	U	D	SD	1.	In general, I think vocational trade and industrial programs are worthwhile.
SA	A	U	D	SD	2	I feel that vocational trade and industrial education is not an advisable program for our public schools.
SA	A	U	D	SD	3.	I am of the opinion that vocational trade and industrial education can meet a very definite need of public high school pupils.
SA	A	U	D	SD	4.	I am in favor of vocational trade and industrial education.
SA	A	U	D	SD	5	There is too much interest shown in vocational trade and industrial education by most school administrations.
SA	A	U	D	SD	6	The words "vocational trade and industrial education" convey to me a feeling of distaste.
SA	A	U	D	SD	7	Vocational trade training seems to be too expensive for the results obtained.
SA	A	U	D	SD	8.	In general, I would recommend vocational trade and industrial education as a part of public school systems.
SA	A	U	D	SD	9	It seems that many vocational trade and industrial education students take the program as an easy subject instead of as a career.
SA	A	U	D	SD	10.	Public schools should provide vocational trade training for the students who want it.
SA	A	U	D	SD	11.	I am enthusiastic about vocational trade and industrial education.

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SA	A	U	D	SD	12	Vocational trade and industrial education should be mainly for those students who have not progressed as far culturally or academically as others.
SA	A	U	D	SD	13.	The country needs more vocational trade and industrial education programs in the public high schools.
SA	A	U	D	SD	14.	In general, vocational trade and industrial education should have more money for their programs.
SA	A	U	D	SD	15	I am unqualifiedly against vocational trade and industrial education in the public schools.
SA	A	U	D	SD	16.	I am thoroughly sold on the idea of trade and industrial education in the public schools.
SA	A	U	D	SD	17.	I would recommend that public schools in different parts of Pennsylvania be encouraged to start this program.
SA	A	U	D	SD	18	I believe that the value received from vocational trade and industrial courses is small in relation to the time spent in them.
SA	A	U	D	SD	19	I feel that we have no reason to consider expanding vocational trade and industrial programs in this country.
SA	A	U	D	SD	20.	Students who take vocational trade and industrial education really seem to enjoy it.
SA	A	U	D	SD	21	Students seem to waste too much time in vocational trade and industrial courses as compared with other high school courses.
SA	A	U	D	SD	22	I think vocational trade and industrial education is bad for public high schools.
SA	A	U	D	SD	23.	Vocational trade and industrial education is a wonderful opportunity for those students who want to learn a skilled trade.
SA	A	U	D	SD	24	Vocational trade and industrial education is less respectable than other school offerings.
SA	A	U	D	SD	25.	Vocational trade and industrial education is one of the best developments that ever happened to our public systems.
SA	A	U	D	SD	26.	If time were available, I would be happy to work on a vocational trade and industrial advisory committee.
SA	A	U	D	SD	27	Vocational trade and industrial education is a good dumping ground for disinterested or lazy students.
SA	A	U	D	SD	28	It seems to me that vocational trade and industrial education is a frill.
SA	A	U	D	SD	29	I have a low regard for those who have taken vocational trade and industrial education.
SA	A	U	D	SD	30.	Vocational trade and industrial education should have the endless support of the superintendent of schools.
SA	A	U	D	SD	31	I detest the idea of some of my own children or grandchildren taking vocational trade and industrial courses in the public schools.
SA	A	U	D	SD	32	Vocational trade and industrial courses cause too much interference with extra-curricular school activities for pupils.
SA	A	U	D	SD	33.	Public schools should be made to realize the importance of vocational trade and industrial programs.
SA	A	U	D	SD	34.	Vocational trade and industrial education provides an excellent opportunity for students to recognize manipulative talents that they may have.
SA	A	U	D	SD	35	A good reason for not backing vocational trade and industrial education is — "Industry is going to use them — why don't they train them."
SA	A	U	D	SD	36.	It is splendid that vocational trade and industrial graduates have specific trade training to sell when they leave high school.
SA	A	U	D	SD	37	The objectives of vocational trade and industrial education can best be met in industry and not in the public schools.
SA	A	U	D	SD	38.	I am very proud to have vocational trade and industrial programs in the public school systems.
SA	A	U	D	SD	39	Vocational trade and industrial education has little value when compared with its high cost.
SA	A	U	D	SD	40.	I wish vocational trade and industrial education programs across the whole nation could be expanded.
SA	A	U	D	SD	41.	Industry seems to recognize the importance of vocational trade and industrial programs in the public high schools.

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SA	A	U	D	SD	42	I reject those people who talk favorably about vocational trade and industrial education.
SA	A	U	D	SD	43.	I think that vocational trade and industrial education is a very valuable asset to the whole secondary education curriculum.
SA	A	U	D	SD	44.	I would recommend vocational trade and industrial education for any community feeling a need for and capable of supporting it.
SA	A	U	D	SD	45	In general, I feel that industry does **not** cooperate in vocational trade and trade and industrial programs.
SA	A	U	D	SD	46.	Vocational trade and industrial education gives a student a chance to get something done that is worthwhile to him.
SA	A	U	D	SD	47.	I feel that school administrators should be taught the importance of having vocational trade and industrial education courses in the public high schools.
SA	A	U	D	SD	48.	It seems that vocational trade and industrial education really holds the interest of high school students who are in the program.
SA	A	U	D	SD	49	In my opinion, a student **cannot** learn very much of value in vocational trade and industrial courses.
SA	A	U	D	SD	50	I am against vocational trade and industrial education as a high school curriculum in most communities.
SA	A	U	D	SD	51	The idea of spending valuable time in the public high schools teaching students to learn a skill or trade is obnoxious to me.
SA	A	U	D	SD	52	Vocational trade and industrial education is of doubtful importance to high school students.
SA	A	U	D	SD	53.	Results of vocational trade and industrial programs I have seen or heard about were beneficial to the communities involved.
SA	A	U	D	SD	54.	High school students seem to be sufficiently interested in vocational trade and industrial education to warrant these programs.
SA	A	U	D	SD	55	I feel that vocational trade and industrial education students spend too much time in their vocational shops compared with their other school subjects.
SA	A	U	D	SD	56	Vocational trade and industrial education should have little "prestige" value in the public high school.
SA	A	U	D	SD	57.	Vocational trade and industrial education programs in the public high schools can be very worthwhile to society.
SA	A	U	D	SD	58	Because of the caliber of a student that elects vocational trade and industrial education, I feel that a general course would be just as worthwhile for him.
SA	A	U	D	SD	59.	Vocational trade and industrial education students seem to become better citizens than they normally would because they can now earn a living.
SA	A	U	D	SD	60.	I personally have great admiration for those who promote vocational trade and industrial education in the public schools.
SA	A	U	D	SD	61	Vocational trade and industrial education is O.K. but most other areas of the school program should have priority.
SA	A	U	D	SD	62	I feel that most high school students associate words such as "revolting" and "disgusting" with vocational trade and industrial education.
SA	A	U	D	SD	63	High school vocational trade and industrial education is unworthy of public support.
SA	A	U	D	SD	64.	I cherish the idea of vocational trade and industrial education in the public high school.
SA	A	U	D	SD	65.	If I had the time, I would enjoy learning more about vocational trade and industrial education.
SA	A	U	D	SD	66	I am opposed to vocational trade and industrial education.

• • • • • • • • •

Please circle ONE of the following five choices:

In general, my attitude toward vocational trade and industrial education as an integral part of a public high school curriculum is:

1. Very favorable
2. Somewhat favorable
3. Undecided or don't know
4. Somewhat unfavorable
5. Very unfavorable

TURN TO NEXT PAGE

Part II

● DIRECTIONS: We would like to know how school administrators feel about specific aspects (nature of offerings, organization, physical facilities, and direction of learning) of vocational trade and industrial education. Please read the statements that follow and circle the response which corresponds the closest to your feelings about each.

Please Do Not Leave Any Out

1. NATURE OF OFFERINGS

SA	A	U	D	SD	1.	I do **not** believe it is desirable to contact management and labor about vocational trade and industrial courses.
SA	A	U	D	SD	2.	I believe vocational trade and industrial education programs should be available to meet the vocational interests of in-school students.
SA	A	U	D	SD	3.	In my opinion programs of vocational trade and industrial education provide for the development of good workmanship.
SA	A	U	D	SD	4.	Vocational trade and industrial education curriculums should be limited to the kinds of industries represented in the school community.
SA	A	U	D	SD	5.	It is imperative that vocational trade and industrial education offerings meet the job opportunities in the school community.
SA	A	U	D	SD	6.	Programs of vocational trade and industrial education should be an important part of all high school programs of studies.
SA	A	U	D	SD	7.	I am convinced that vocational trade and industrial education should maintain contact with representatives of industrial management.
SA	A	U	D	SD	8.	Community labor leaders do **not** need to be consulted regarding programs of vocational trade and industrial education.
SA	A	U	D	SD	9.	In my opinion vocational trade and industrial education curriculums should be provided solely on a post-secondary level.
SA	A	U	D	SD	10.	I believe programs of vocational trade and industrial education have proved of value to high school graduates who enrolled in the program.
SA	A	U	D	SD	11.	I feel students of a vocational trade and industrial education program stand a good chance of getting jobs for which they were trained upon graduation.
SA	A	U	D	SD	12.	Vocational trade and industrial education is the logical curriculum in which to place the slow or low ability student.
SA	A	U	D	SD	13.	In my opinion programs of vocational trade and industrial education should accept **only** those students who have the capacity to meet minimum occupational employment requirements.
SA	A	U	D	SD	14.	I believe vocational trade and industrial education curriculums should be more concerned with teaching effective citizenship than with developing occupational skills.
SA	A	U	D	SD	15.	Industrial arts can do the job of preparing students for industrial employment as satisfactorily as vocational trade and industrial education.

2. ORGANIZATION

SA	A	U	D	SD	16.	Vocational trade and industrial education courses segregate students from being an integral part of the total school program.
SA	A	U	D	SD	17.	In my opinion industrial arts serves an important guidance function for students wishing to pursue a vocational trade and industrial education program.
SA	A	U	D	SD	18.	I believe there is satisfactory participation of vocational trade and industrial students in extra curricular activities.
SA	A	U	D	SD	19.	I do **not** believe it is necessary to employ a person to supervise a program of vocational trade and industrial education.
SA	A	U	D	SD	20.	Group instruction should form the principal basis for operating a vocational shop course.
SA	A	U	D	SD	21.	I believe, vocational trade and industrial education programs cost **too** much to operate.
SA	A	U	D	SD	22.	High school scheduling does **not** lend itself to the required three clock hours per day of vocational trade and industrial education shop activity.

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SA	A	U	D	SD	23.	Guidance and counseling should be relied upon to select students who can profit by the vocational shop instruction.
SA	A	U	D	SD	24.	Advisory committees are essential to the organization of vocational trade and industrial education programs.
SA	A	U	D	SD	25.	It is legally possible to organize area technical schools at the secondary level.
SA	A	U	D	SD	26.	I am of the opinion that placement records should be kept of students graduating from the program.
SA	A	U	D	SD	27.	I believe, vocational trade and industrial education advisory committees create problems for school administrators.
SA	A	U	D	SD	28.	I am of the opinion that local programs of trade and industrial education are under the direction of well qualified persons.
SA	A	U	D	SD	29.	It is desirable to establish minimum enrollment standards for students of vocational trade and industrial curriculums.
SA	A	U	D	SD	30.	I do **not** believe it possible to secure Department of Public Instruction approval for a cooperative work experience vocational trade and industrial education program.
SA	A	U	D	SD	31.	Follow-up of vocational trade and industrial education graduates is an important aspect of a good program.
SA	A	U	D	SD	33.	I do **not** believe that existing class schedules permit vocational shop students to participate in school activities such as athletics, student councils, and clubs.
SA	A	U	D	SD	34.	State standards pertaining to time requirements for manipulative classes (3 clock hours of shop per day) are unrealistic.

3. PHYSICAL FACILITIES

SA	A	U	D	SD	35.	I feel vocational trade and industrial shop facilities are prohibitively costly.
SA	A	U	D	SD	36.	I feel there should be provided separate facilities for holding adult trade and industrial classes.
SA	A	U	D	SD	37.	Vocational shop equipment needs to be kept in good working condition.
SA	A	U	D	SD	38.	Industrial size equipment for the vocational trade and industrial shop is too costly to maintain.
SA	A	U	D	SD	39.	In my opinion it is foolish to provide 2400 square feet of floor space for a vocational machine shop.
SA	A	U	D	SD	40.	Vocational shop equipment needs to be of the most up-to-date type.
SA	A	U	D	SD	41.	The vocational trade and industrial education physical facility should be housed in a separate building away from other educational facilities.
SA	A	U	D	SD	42.	I believe it is well to have a functioning plan for replacement of vocational trade and industrial shop equipment.
SA	A	U	D	SD	43.	I think obsolete school buildings make good facilities in which to house the vocational trade and industrial education program.

4. DIRECTION OF LEARNING

SA	A	U	D	SD	44.	In my opinion poor discipline prevails in vocational shop classes.
SA	A	U	D	SD	45.	Vocational trade and industrial teachers are not well accepted by teachers of academic subjects.
SA	A	U	D	SD	46.	Vocational trade and industrial teachers show initiative in preparing teaching materials and aids.
SA	A	U	D	SD	47.	I believe it is important that vocational shop teachers possess adequate trade and/or industrial experience.
SA	A	U	D	SD	48.	Vocational shop teachers show a lack of understanding of professional ethics.
SA	A	U	D	SD	49.	The pre-service teacher training program as provided by the university is functional.
SA	A	U	D	SD	50.	I believe vocational shop teachers participate cooperatively in all phases of the school program.
SA	A	U	D	SD	51.	Vocational shop facilities are maintained in good order.
SA	A	U	D	SD	52.	Vocational trade and industrial teachers are poorly qualified to teach.
SA	A	U	D	SD	53.	I believe vocational shop supplies are stored in good order.
SA	A	U	D	SD	54.	A program of in-service training is necessary to keep vocational shop teachers up-to-date in the technology of their occupation.

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SA	A	U	D	SD	55.	I do **not** believe that vocational trade and industrial teachers take an active part in community affairs.
SA	A	U	D	SD	56.	I believe vocational shop teachers usually have a course of study for the trade being taught.
SA	A	U	D	SD	57.	Vocational shop teachers use instructional methods that secure the attention and interest of the students being taught.
SA	A	U	D	SD	58.	The quality of work done should be in keeping with industrial practices.
SA	A	U	D	SD	59.	I feel individualized instruction is an important aspect of vocational trade and industrial teaching .
SA	A	U	D	SD	60.	Vocational trade and industrial teachers use a variety of teaching methods, such as: lecture, demonstration, conference, resource persons, student committee reports, etc.
SA	A	U	D	SD	61.	A student personnel system is essential to the effectiveness of a vocational shop class.
SA	A	U	D	SD	62.	I believe safety education constitutes a **major** aspect of any vocational shop.
SA	A	U	D	SD	63.	I do **not** feel that vocational shop students are kept busy at definite assignments.
SA	A	U	D	SD	64.	I am of the opinion that textbooks are rearly needed in teaching vocational shop subjects.
SA	A	U	D	SD	65.	Vocational trade and industrial teachers make efficient use of materials and supplies.
SA	A	U	D	SD	66.	Visual aids, such as films, slides, mock-ups and cut-aways are used effectively by vocational shop teachers.
SA	A	U	D	SD	67.	I feel that vocational shop students should make frequent use of reference materials.
SA	A	U	D	SD	68.	I do **not** believe it is desirable to use workbooks in vocational shop classes.
SA	A	U	D	SD	69.	I do **not** believe it is necessary to grade vocational trade and industrial students as critically as other students.
SA	A	U	D	SD	70.	Vocational trade and industrial education teachers make **little** use of tests.
SA	A	U	D	SD	71.	A chart of individual student progress is important for evaluating student progress.
SA	A	U	D	SD	72.	I believe vocational trade and industrial teachers should visit with parents for the purpose of discussing the student's progress.

• • • • • • • •

PERSONAL AND OTHER DATA

DIRECTIONS: Please answer each question below by checking (/). More than one check **may** be used for some **items.**

Your age at the present time:

1. ( ) 20-24 years
2. ( ) 25-29 years
3. ( ) 30-39 years
4. ( ) 40-49 years
5. ( ) 50-59 years
6. ( ) 60 years or over

You have been employed as a counselor by *this* board of education for:

1. ( ) less than 1 year
2. ( ) 1 to 3 years
3. ( ) 4 to 6 years
4. ( ) more than 6 years

3. Your length of previous employment as a school counselor:
   1. ( ) None
   2. ( ) 1 to 5 years
   3. ( ) 6 to 10 years
   4. ( ) 11 to 15 years
   5. ( ) 16 to 20 years
   6. ( ) 21 to 25 years
   7. ( ) 26 to 30 years
   8. ( ) 31 years and over
4. Your academic preparation includes:
   1. ( ) Less than college degree
   2. ( ) Four-year college degree

3. ( ) Work beyond four-year degree but not master's degree
4. ( ) Master's degree
5. ( ) College work beyond master's degree
6. ( ) Doctorate degree

5. Your length of employment as a teacher:

1. ( ) None
2. ( ) 1 to 5 years
3. ( ) 6 to 10 years
4. ( ) 11 to 15 years
5. ( ) 16 to 20 years
6. ( ) 21 to 25 years
7. ( ) 26 to 30 years
8. ( ) 31 years and over

6. Your undergraduate work was taken in:

1. ( ) art
2. ( ) English
3. ( ) home economics
4. ( ) industrial arts
5. ( ) mathematics
6. ( ) music
7. ( ) physical education
8. ( ) science
9. ( ) social science
10. ( ) other

7. Besides work as an educator you have had experience in:

1. ( ) industry
2. ( ) business
3. ( ) agriculture
4. ( ) retailing
5. ( ) sales
6. ( ) commercial

8. Your length in employment in work *other* than education was:

1. ( ) 1 to 3 years
2. ( ) 4 to 6 years
3. ( ) 7 to 9 years
4. ( ) 10 to 12 years
5. ( ) 13 to 15 years
6. ( ) 16 years and over

9. In your formal educational preparation did you take course work in:

1. ( ) Vocational agriculture
2. ( ) Vocational trade and industrial education
3. ( ) Vocational home economics
4. ( ) Vocational distributive education
5. ( ) A survey of vocational education
6. ( ) Industrial arts
7. ( ) Home economics
8. ( ) None

10. Does your community have a vocational and adult education program?

1. ( ) Day and evening
2. ( ) Evening only
3. ( ) None

STOUT STATE UNIVERSITY
MENOMONIE, WISCONSIN
54751

Fellow Educator:

The way in which vocational education can help combat the unemployment problem, is as you know, an important point of discussion among schoolmen. We who are in the field of vocational trade and industrial education feel a special urgency to gather as many facts as we can, as fast as we can so that we can fulfill our responsibility in future planning. Accompanying this letter is a survey which we believe will fill in some of the pieces of the vocational education puzzle. We hope you will be able to complete it soon and return it in the enclosed envelope. Your name is not necessary.

As you will see, this instrument is an attitude scale designed to indicate ways in which counselors view trade and industrial education. Also included on the form is selected beographical data through which we hope to identify any correlation between background and attitude. This instrument was developed at The Pennsylvania State University where it was found to be both valid and reliable with school administrators selected on a random sample basis. We have modified the biographical portion of the scale and are the first to use it with a population of counselors. All of your guidance colleagues in Wisconsin are being asked to participate in this attitude survey.

This scale is part of a research study being sponsored by the Board of Regents of Wisconsin State Colleges so that Wisconsin can maintain its leadership in vocational education. Results will be reported at the January 1965 Stout State College guidance conference and, hopefully, in professional publications. If you would like a personal copy of the results, place your name and address on the back of the scale and a summary will be mailed to you next fall.

Yours truly,

Neal W. Prichard
Assistant Professor
Industrial Education

STOUT STATE COLLEGE • MENOMONIE, WISCONSIN 54751

Fellow Educator:

The response to our recent questionnaire on counselors' attitudes toward vocational trade and industrial education was gratifying. We wish to thank each of you personally for your contribution. But since that is not possible now at least, please accept this letter as sincere appreciation.

If somehow the questionnaire has gotten buried on your desk (as they do on ours) we hope that you will be able to use the enclosed envelope to return it soon.

Yours truly,

Neal W. Prichard
Assistant Professor
Industrial Education

P.S. We are enclosing another scale for your convenience or record.

Scoring SCI Attitude Scales

Items 1-66

Each item is preceded by five choices for the individual to respond. The items are either favorable or unfavorable.

Favorable Items. All items are considered favorable if they have a period following the item number (see items 1, 3, 4, etc.). They should be scored:

SA	A	U	D	SD
5	4	3	2	1

Examples:

SA	(A)	U	D	SD	X.	4 points
SA	A	U	(D)	SD	X.	2 points

Unfavorable Items. All items considered unfavorable do not have periods after the item number (see items 2, 5, 6, 7, etc.). They should be scored:

SA	A	U	D	SD
1	2	3	4	5

Examples:

SA	A	(U)	D	SD	X.	3 points
(SA)	A	U	D	SD	X.	1 point
SA	A	U	D	(SD)	X.	5 points

Enter the correct number of points for each item next to the item number. Write the favorable number in front of the item number and the unfavorable item points between the item number and the statement. Total the number of points scored by favorable and unfavorable items on the bottom of each page. The maximum score on this portion is 66 x 5 points for a total of 330 points. The minimum score on this portion is 66 x 1 point for a total of 66 points. The single item that is unnumbered on the bottom page three should be omitted.

Part II

This portion is scored different from the first part. Each item can receive only one point. The answer keys indicate the correct answer. Write the total score earned on the bottom of each page.