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VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP FOR RURAL GUIDANCE WORKERS (WESTERN ILLINOIS UNIVERSITY, AUGUST 15-26, 1966).

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A TWO-WEEK WORKSHOP IN EDUCATIONAL-VOCATIONAL INFORMATION FOR TWENTY RURAL GUIDANCE WORKERS WAS CONDUCTED IN AUGUST, 1966. THE OBJECTIVES OF THIS PROJECT WERE TO UP-DATE COUNSELORS CONCERNING OCCUPATIONAL INFORMATION AND TO DEVELOP NEW APPROACHES FOR DISSEMINATING VOCATIONAL INFORMATION. DURING THE COURSE OF THE WORKSHOP, THE CAREER AND VOCATIONAL KNOWLEDGE TEST (CVKT) AND A CAREER QUESTIONNAIRE WERE DEVELOPED FOR THE PURPOSE OF DETERMINING THE EFFECTIVENESS OF THE TWENTY PARTICIPANTS WITHIN THEIR RESPECTIVE SCHOOLS. TWO RURAL SCHOOLS WHOSE COUNSELORS DID NOT ATTEND THE WORKSHOP WERE SELECTED AND THE STUDENTS OF THESE SCHOOLS WERE UTILIZED AS A CONTROL GROUP. INCREASED EFFORTS WERE MADE TO PROVIDE ADDITIONAL VOCATIONAL INFORMATION FOR THE EXPERIMENTAL GROUP, WHOSE COUNSELORS ATTENDED THE WORKSHOP. BOTH THE CONTROL AND EXPERIMENTAL GROUPS WERE TESTED IN THE SAME MANNER AND AT THE SAME TIME OF YEAR. THE EXPERIMENTAL GROUP SHOWED SIGNIFICANT GAINS ON THE CVKT OVER THEIR COUNTERPARTS IN THE CONTROL SCHOOLS, WHEREAS FEW DIFFERENCES WERE NOTED FROM ADMINISTRATION OF THE CAREER QUESTIONNAIRE. IN SUBJECTIVE EVALUATIONS MADE BY THE TWENTY COUNSELORS, THERE WAS GENERAL AGREEMENT THAT THIS APPROACH TO IN-SERVICE EDUCATION WAS VALUABLE. (ES)

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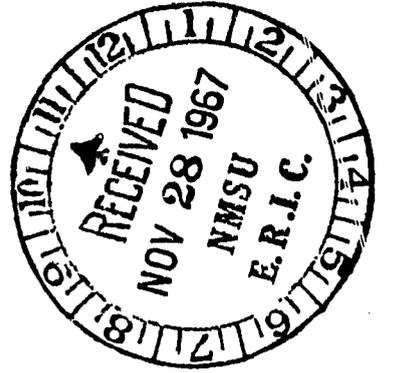
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FINAL REPORT

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VOCATIONAL-EDUCATIONAL INFORMATION

WORKSHOP FOR RURAL GUIDANCE WORKERS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP
FOR RURAL GUIDANCE WORKERS

6-2208
OEG-3-6-062208-0716

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June, 1967

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Western Illinois University

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INTRODUCTION

Problem

Rural youth have special problems of vocational adjustment. Farmers and farm workers will actually decrease in demand during the present decade by 18%. This is while the need for other kinds of workers will increase from 18% to 40% (11). The rural high school student in all probability will not be able to find employment in the familiar surroundings of his childhood. Only about one boy in ten now living on farms can expect to make an adequate living in agriculture (6). This condition means that he must adjust to a vocational environment which is quite foreign to him. We frequently allude to the difficulty the typical urban student has in obtaining a realistic concept of the myriad of employment possibilities, but in the rural student we find increased difficulties associated with his environment. His environment provides limited contact with the urban economy and he has few opportunities to even hear the terms so frequently encountered in an urban society. The meaning of unionism, the commuting trains, large secretarial pools, the struggle for advancement in a corporation, are concepts which can have only the most superficial meaning to most rural youth.

We hardly need to mention the rapid changes in the vocational world. Most people are aware of those changes, but are vague about their implications. One result is the rise and fall of "glamour" occupations. Many young people choose to be "airplane pilots", "airline hostesses", "computer technicians" and "space scientists" on the basis of colorful magazine ads and news stories. Very little exposure to the unglamorous facts is possible since so little information is available and the counselors are as ill-informed as the students. As indicated by Lindstrom's report, most rural youth must gain their knowledge from non-professionals in the community and they gain little knowledge of the jobs becoming available in urbanized communities (6).

Inadequate preparation of counselors has been a topic of concern since counselors have been in existence. The inadequacy is felt in various areas, however, one of these is in the area of occupational information. In a report on the teaching of occupations, Sinick and Hoppock report on the 1963-64 Illinois Information Report of Guidance Services which indicates that only one-third of the non-Chicago school counselors had credit in courses dealing with occupational information or vocational guidance (10). Very likely many of this one-third were counselors in suburban and urban schools, since this is the usual pattern of employment of qualified counselors in the mid-west. This leaves a

very small proportion of school counselors in rural areas who are even minimally equipped to deal with a very complex situation. Lindstrom (6) reports that less than 4% of the rural youth he studied had the services of a high school counselor.

In 1946, Recktenwald (7) studied the vocational interests of 166 ninth grade boys. He found that boys who read occupational literature changed their attitudes with regard to disliked occupations, while boys who had not read the literature did not change. Hoyt, however, points out that valid information for the specialty oriented student is not readily available (5), and Brayfield (1) pointed out that information on low-skill-level jobs is not available.

In 1948, Brayfield (2) stated the following assumptions which he believed to be implicit in the teaching of occupational information: 1. The individual will make specific application of the content of the course to his own situation with a minimum of individual assistance. 2. The individual who has been formally exposed to occupational information will make more appropriate vocational choices than the individual who has not been so exposed. 3. The individual completing such a course will develop attitudes and skills which will carry over as new problems of vocational adjustment arise. He urged concentration on more adequate forms of group instruction which would integrate socio-psychological materials. Conny and Hoppock (3, 4) and Rosengarten (9) have demonstrated how a course in job finding resulted in higher earnings by high school graduates.

There seems to be adequate evidence of the value and need for vocational information in the high schools. However, the specific sources are frequently lacking, and the understanding of the psychological effect of information on vocational behavior, seems to be inadequate.

This project was conceived as an attack on the problem of counselors being inadequately informed about occupations and there being too little accomplished in high schools to provide students with adequate vocational information, especially for those who are not college prone. Particular emphasis was given to information about vocational training, employment, and certification in the tri-state area of Illinois, Iowa, and Missouri, as specialists in these areas were brought to the Western Illinois University campus to meet with these counselors. The counselors were then encouraged and helped to develop new approaches to disseminating educational-vocational information in their school the following school year.

Purposes, Objectives and Hypotheses

The objectives and purposes discussed in this section are directly related to the needs as stated above. The objective was to attack the problem of inadequate knowledge of vocational and educational information amongst rural guidance workers and to assess the value of this particular method of attack. This project consisted of three phases; a training phase, an implementation phase, and an evaluation phase.

One objective of the training phase was to expose the guidance workers to as much specific, concrete educational and vocational information as possible in a short time through the utilization of a variety of consultants on various topics. A second objective was to encourage the guidance workers to plan some new activity in their high school the next year. The ultimate objective of this workshop was to provide rural high school students with a greater degree of accurate educational-vocational information in order that they might grow towards more satisfactory vocational adjustments.

The objective of the implementation phase of the project (the 1966-67 school year), was to encourage and assist the guidance workers to continue with their plans for increased dissemination of educational-vocational information. Four drive-in conferences conducted on Saturdays provided opportunity for additional exposure to specialists and discussion of the merits of various vocational guidance techniques.

The evaluation phase of the project consisted of two areas of investigation, and extended throughout the time period of the project. First, the opinions and feelings of the participants as well as the staff in their schools were to be surveyed. Second, the effects of the increased informational services on the students were to be measured.

Specific hypotheses (stated in null form) to be tested were:

1. The increased informational services will have no significant effect on the vocational knowledge of the students.
2. The increased informational services will have no effect on various vocational attitudes of the students.

DESCRIPTION OF METHODS AND PROCEDURES

Preliminary Procedures

On May 3, 1966, the Steering Committee (see Appendix A), met at Western Illinois University to discuss the most appropriate plans for publicizing the workshop and for selecting the consultants and activities for the workshop.

Regarding publicity, the Steering Committee recommended that, in view of the lateness of the date, special efforts should be made to contact all county superintendents in Illinois, all unit superintendents, high school principals, and junior high principals in West-Central Illinois, and all Iowa and Missouri school guidance personnel within 100 miles of Western Illinois University as listed in state directories. This resulted in a mailing to 642 individuals.

The mailing consisted of a cover letter (Appendix B), an announcement brochure (Appendix C), poster (Appendix D), participant's application form (Appendix E) and school application form (Appendix F).

In response to this mailing, a total of 54 applications from the surrounding area were received. There were 46 applications from Illinois, 7 from Iowa and 1 from Missouri.

The applications were evaluated by the director of the workshop and Dr. John Storey, a member of the Steering Committee. From the 54 applicants, 20 names and 6 alternates were selected. The criteria for selection were: Qualifications of the participants in terms of their professional preparation; being engaged as a guidance counselor for the school year, 1966-67; potential for improvement of the information services in their respective high school; and proportion of rural students enrolled.

On June 2, 1966, letters were mailed to applicants regarding action on their application. The applicants invited to participate were required to return a committal form (see Appendix G) and their supervisor was required to sign an agreement regarding increased information services during the 1966-67 school year. Three individuals were unable to accept the invitation, hence the first three alternates were invited. The final list of participants appears as Appendix H.

Selection of Consultants

During the May 3, 1966 meeting of the Steering Committee, a number of possible consultants were suggested. Mr. James Smith,

Chief, Vocational Guidance Services, Board of Vocational Education and Rehabilitation, Illinois, was particularly helpful in this regard.

Throughout the summer months, various persons were contacted by telephone or by letter, requesting that they serve as consultants to the workshop. The final roster of consultants and the schedule for the two-week workshop appears as Appendix I.

There was a special effort made to obtain consultants who were very close to the source of information on which they were to speak. Emphasis was placed on the trades and technical occupations. This method of selection was intentionally planned to explore topics in depth rather than breadth on the assumption that in-depth knowledge in one area might lead to a more effective pursuit of information in other areas by the counselor.

The Workshop for Rural Guidance Workers

From August 15, 1966 to August 26, 1966 the 20 participants in the workshop attended the sessions as scheduled. Each participant had a 100% attendance record, and participated fully in this aspect of the project.

Each participant explored various possibilities for increasing the effectiveness of their school's educational-vocational information service. They often discussed these plans with their peers and with the workshop director. The participants also assisted in the development of the vocational information test and a career questionnaire to be administered to students in their high schools.

The participants were also asked to evaluate each session of the workshop. The rating sheet used for this purpose appears as Appendix J.

Development of the Career and Vocational Knowledge Test and the Career Questionnaire

The director and the faculty assistant employed to work on the project began in June, 1966, to develop the model for a test of vocational information. This test is an objective, multiple choice instrument for high school students. It has two forms (two forms were needed for pre and post testing in this project), and is a 50 minute test. The composition of the test is a sampling of factual knowledge about various types of occupations, with the sampling to be homogenous over the range of vocations.

To accomplish this, the model for classifying occupations suggested by Roe (8) was selected and used in a modified form.

The model used for constructing items was a 5 x 7, two dimensional classification adapted from the "areas" and "levels" suggested by Anne Roe's scheme. The levels used for this instrument were:

1. Professional; Managerial, Higher
2. Professional; Managerial, Regular
3. Semi-Professional; Managerial, Lower
4. Skilled
5. Semi-Skilled; Unskilled¹

The areas used for this instrument were:

1. Outdoor, Mechanical, Physical, Technology
2. Math-Science
3. Business Contact
4. Artistic, Music, Entertainment
5. Literary, Humanistic
6. Social-Personal
7. Administration, Clerical, Business Detail, Computational

The workshop participants, aided by the assistant to the director, constructed approximately 400 items, each of which was designed to "fit" into one of the 35 cells of the 5 x 7 matrix. From this pool of items, four for each cell were selected; two were assigned randomly to each of two forms of the instrument. This resulted in a form A and form B of parallel tests, each with 70 items. Copies of these tests appear as Appendix K and L.

In order to evaluate the vocational attitudes of the students involved, a Career Questionnaire was developed. This questionnaire was designed for machine scoring with the exception of two items requesting students to express their "preferred" and probable vocational choice. Several items were included to assess students' opinions and feelings about their future, as well as to collect certain demographic information. This questionnaire appears as Appendix M.

¹These two levels were combined throughout this project evaluation, because it was expected that very few students would select this level as a career plan at this time.

Collecting and Processing of Data

Soon after the conclusion of the workshop, the Career and Vocational Knowledge Test and Career Questionnaire were duplicated and mailed to the participating schools. Machine scorable answer sheets were provided for students enrolled in the participating schools. In most cases, the entire enrollment participated in the study; however, in certain instances where the schools had large enrollments, a sample of students was used. The completed answer sheets were returned along with available ability test results on these students.

During the late spring, each participating school repeated the process using an alternate form of the Career and Vocational Knowledge Test. Evaluation forms were also administered to other professional staff of the participating schools.

Two rural high schools agreed to serve as control schools. The students in these control schools were administered the same instruments as in the participating schools. The purpose of having data from non-participating schools was to provide a control group in order to evaluate the effect of the workshop on students when compared with students not exposed to counselors participating in the project.

Drive-In Conferences

During the school year, 1966-67, as provided in the original proposal, four Saturday meetings were held with the participating counselors. The purposes of these meetings were multiple and varied between meetings. In general, they were intended to:

1. Provide participants with opportunities to discuss, modify, and evaluate the vocational information procedures being implemented in their schools.
2. Provide additional informative experiences in the area of vocational knowledge.
3. Provide direct communications with the director regarding problems associated with the evaluation phase of the project.
4. Provide additional opportunities for interaction between the participating counselors.
5. Provide the participating counselors with a sense of identity with the project throughout the school year.

The actual activities of the drive-in meetings were as follows:

October 8, 1966

- a) Return completed answer sheets from the fall administration of the evaluation instruments.
- b) Buzz sessions, with those counselors planning various kinds of informational services meeting together to share ideas and problems. Some of the techniques being discussed were: small group counseling, instructional techniques (vocational units, guidance classes, etc.), visiting speakers for interest groups, and miscellaneous procedures.
- c) Planning for the second drive-in meeting. The group expressed an interest in group counseling techniques and another plant tour.

November 19, 1966

In response to the desire for some instruction in group counseling techniques, a consultant from the University of Illinois was retained. During this meeting, a demonstration of group counseling was given utilizing the participating counselors as subjects.

March 11, 1967

- a) In response to the counselors' felt need for additional contact with the personnel practices of industry, a plant tour of a local industry was arranged.
- b) Materials and instructions for administering the spring evaluation instruments were distributed.

May 6, 1967

This meeting was planned primarily as an evaluation meeting, although participants also returned the materials from the spring evaluation. This meeting was devoted to a group discussion of the entire project. The participants also submitted written evaluations of the project.

Compilation and Analysis of Data; Final Report

After the answer sheets from the spring administration of the evaluation instruments had been returned from both partici-

pating schools and control schools, machine processing was arranged. Each test answer sheet and each questionnaire answer sheet was processed by an IBM 123 Optical Mark Scoring Reader which resulted in IBM cards punched by an attached IBM 34 Card Punch. The data contained in these cards were then processed with an IBM 1620 Computer with attached IBM 622 Card Reader, IBM 1311 Disc Storage and IBM 1443 Printer. A frequency distribution program was used.

During the period June 5, 1967 to June 16, 1967, the director and the assistant extracted the pertinent data from the output of the computer. Appropriate statistical procedures were employed and this final report compiled.

RESULTS

Subjective Evaluation of the Project Activities by Counselors

As mentioned previously, each workshop participant completed evaluation forms during the workshop and in the spring of 1967 at the end of the project period. The results of these evaluations are reported below.

The Evaluation of Individual Workshop Sessions (Appendix J) contained three rating scales with space for free responses. No attempt will be made here to summarize the hundreds of written responses; however, a summary of ratings is provided below:

Table 1

COUNSELORS' EVALUATION OF THE INDIVIDUAL WORKSHOP TOPICS

Question I. How important do you feel this topic is for school counselors?

Rating	Percent of Counselors Marking Each Rating for the Respective Sessions																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Critical importance	35	10	52	0	45	25	25	33	30	25	0	5	5	25	10	10	0	15
Very important	60	45	43	15	35	60	50	43	55	55	35	45	35	40	35	40	30	60
Important	5	35	5	80	20	15	25	24	5	20	60	50	60	30	55	50	70	25
Not very important	0	10	0	5	0	0	0	0	10	0	5	0	0	5	0	0	0	0
Very little importance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

It can be seen that there was some variation in the importance of the topics of the sessions from the viewpoint of the counselors. It may be that the raters became more critical as the workshop progressed, as the percentage of high ratings decreased somewhat with time. The most typical rating was a b) Very important, with about an equal distribution of a) Critical importance, and c) Important ratings. Examining the topics which the

participants considered the most important to school counselors, indicated they were those which dealt with evaluation of vocational-technical training. These sessions were held during the first week, and it, of course, is not possible to determine whether order, topics, or speakers were the cause of the higher ratings.

The counselors were asked to indicate the impression made by the speakers. A summary of these ratings appears below:

Table 2

COUNSELORS' EVALUATIONS OF INDIVIDUAL WORKSHOP SPEAKERS

Question II. How did the speaker impress you?

Rating	Percent of Counselors Marking Each Rating for the Respective Speakers																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
He irritated me considerably	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
He irritated me some	0	5	0	14	0	0	5	0	0	0	0	5	5	10	0	0	4	30
I felt pretty neutral about him	0	28	10	48	0	0	20	0	30	10	50	33	45	10	60	10	38	30
I felt positively about him	75	62	70	38	50	45	55	60	55	70	45	43	50	80	40	25	58	30
I felt very positive about him	25	5	20	0	50	55	20	40	15	20	5	19	0	0	0	65	0	4

Again, there is a variation in the kind of impressions made by the various speakers. There is, of course, a positive correlation between the ratings on items I and II; however, the relationship is not perfect, an indication of some differentiation on the part of the counselors between the importance of the topic and the impression made by the speaker. The same phenomena of high ratings for the earliest sessions dealing with vocational, technical, and non-collegiate training was observed.

The counselors were asked to rate the information given in each individual session. A summary of these ratings appears below:

Table 3

COUNSELORS' EVALUATION OF THE INFORMATION GIVEN IN EACH INDIVIDUAL WORKSHOP SESSION

Question III. About what the speaker said: (Mark as many as apply)

Rating	Percent of Counselors Marking Each Rating for the Respective Speakers																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
It was mostly repetition of what I already know	0	17	11	4	4	9	11	0	38	14	8	4	23	0	12	0	4	12
He didn't seem to have much to say	0	0	0	4	0	0	0	0	0	0	8	4	12	0	4	0	0	8
It was reasonably informative	27	35	8	42	0	9	19	7	23	18	44	43	42	24	44	4	31	31
He had a great deal of information to give	50	39	48	19	40	44	44	45	39	50	28	36	15	56	32	52	46	19
I learned a great deal that I hadn't known before	23	9	33	31	56	38	26	48	0	18	12	13	8	20	8	44	19	27

The responses to this question again indicated that the participants tended to respond more favorably to the earlier sessions which were directed more strongly towards information about occupations not requiring college preparation. There is some suggestion that the "halo" effect is operating in the case of these three ratings.

At the close of the workshop, the counselors were asked for a general evaluation of the workshop. The form used for this purpose appears as Appendix N. Summary of the evaluations appear in Tables 4, 5, and 6 which follow.

Table 4

COUNSELORS' GENERAL EVALUATION OF THE WORKSHOP - FALL

Question 1. In general, what is your opinion of this kind of experience with respect to its value to you as a counselor and in comparison with other aspects of your graduate education?

Response	Percent Selecting
Unimportant	0.0
Not very important	0.0
Important	5.0
Quite important	30.0*
Very important	70.0*

*One counselor marked two responses.

Table 5

COUNSELORS' GENERAL EVALUATION OF THE WORKSHOP - FALL

Question 2. In general, how do you feel about the total program of this workshop with respect to the quality of consultants and their contributions?

Response	Percent Selecting
Poor	0.0
Fair	0.0
Average	0.0
Good	40.0*
Excellent	65.0*

*One counselor marked two responses.

Table 6

COUNSELORS' RANKINGS OF THE VALUE OF THE INDIVIDUAL
WORKSHOP SESSION - FALL

Ranks of Individual Sessions - Based on Smallest Sums of Rank by
Individual Participants

Sessions	Sum of Ranks	Rank of Sums
1	111	3
2	207	11
3	100	2
4	259	15
5	81	1
6	119	4
7	187	8
8	138	6
9	173	7
10	191	9
11	214	12
12	239	13
13	264	16
14	194	10
15	268	17
16	123	5
17	255	14
18	277	18

Table 7

COUNSELORS' RANKINGS OF THE VALUE OF THE INDIVIDUAL
WORKSHOP SESSION - SPRING

Ranks of Individual Sessions - Based on Smallest Sums of Rank by
Individual Participants*

Sessions	Sum of Ranks	Rank of Sums
1	83	2
2	126	5
3	127	6
4	240	17
5	82	1
6	111	3
7	178	11
8	125	4
9	174	10
10	203	12
11	165	9
12	219	15
13	215	14
14	143	8
15	213	13
16	142	7
17	235	16
18	302	18

*Based on 18 returns, one participant was hospitalized during the spring and one return was not scorable.

Tables 6 and 7 are a summary of the counselors' rankings of the individual sessions taken in the fall and spring respectively.

In general, it seems that the rankings of the sessions by the counselors of the individual sessions in the spring were similar to their ratings immediately following the workshop.

During the spring, participants were also asked to evaluate the workshop in general. A summary of these ratings appears below:

Table 8

COUNSELORS' EVALUATION OF THE WORKSHOP - SPRING

Question II. In general, how do you feel about this type of workshop?

	N	%
1. It was extremely valuable and plans should be made to continue it.	9	47.3
2. It was valuable, but some modifications should be made in its structure.	9	47.3
3. It was an interesting experiment, possibly worth modifying for the future.	1	5.3
4. It was not particularly valuable, and probably not too promising as an idea.	0	0.0
5. It was definitely not a good idea, I do not suggest pursuing it any further.	<u>0</u>	<u>0.0</u>
	19*	99.9

*One participant was hospitalized when this evaluation was done.

The responses to Question II indicate strong support for this type of in-service training for counselors. The suggested modifications seemed to vary considerably, and do not follow any consistent pattern. The suggestions will be discussed in detail later in this section.

Questions III, IV, and V were free response questions and as such, it is more difficult to give a definitive summary. It was

felt, however, that these responses might actually reveal some important information of the feelings of the participants. The workshop staff attempted to summarize these responses to these questions below.

Question III read: The goals of this workshop were to: 1) Make you more informed, and 2) Stimulate new informational services in your school. How well do you feel these goals were accomplished? Fourteen of 19 participants expressed the feeling that both goals were accomplished. Two felt that the first goal was better accomplished than the second, while one indicated that more training is needed and one felt the goals were only fairly well accomplished. It seems that the feeling was rather positive about the accomplishment of the purposes of the project.

Question IV read: What specific suggestions do you have for improvement of this type of workshop? (Provided you think it is a good idea.) Due to the lack of any consistent trends in the answers, they will be quoted verbatim in Table 9.

Table 9

COUNSELORS' EVALUATION OF THE WORKSHOP - SPRING

Question IV. What specific suggestions do you have for improvement of this type of workshop? (Provided you think it is a good idea.)

Participant	Response
1	I think it is an excellent idea. I liked it just as it was. The cross section in the workshop was good. All so different and all so verbal.
2	I think that this type of workshop would be even more valuable to the guidance person with limited experience in the field (perhaps one year). I definitely feel that it would have been more valuable to me several years back. I would have liked to have had a background in the areas such as the workshop offered much earlier!
3	I believe this could be combined into a one-week yearly program, if necessary, with regular tuition. If the same type talent could be secured each year, it could go on indefinitely and it would be one way in which one could try to keep informed.
4	I enjoyed the field trips very much. One can always learn by seeing. Should a workshop of this type ever be used again, perhaps films could be used instead of all lectures.
5	The value of this type of workshop would have been increased for me, if we had discussed more fully in the beginning session or in a pre-workshop session the project (career test and questionnaire) and the relationship to our innovations in our school systems during the school year.
6	Have a follow-up program with the people who attended the first workshop. We can benefit with the comments from each. Include more time for questions from the group with the guest speakers.

Table 9 (Cont.)

- 7 I would suggest that it be covered in its entirety during the summer period. I would also suggest that future workshops of this nature be held in the many vocational areas left uncovered, specifically to bring it together where many can benefit from it.
- 8 I feel that the follow-up meetings were a bit unorganized and its purposes were unrelated to the two-week session, during the summer. I was satisfied however with the group counseling session.
- 9 Terminate the workshop in two weeks.
- 10 More credit could be earned through independent study.
- 11 I agree with Dr. Hoyt in that we spend too much time on college bound students and should try to get more information and help for the non-college bound students. Also more help, materials, etc., for the lower half of the class students. I do think it would have improved this type of workshop, since we are working with the majority of rural or farm students, more materials concerning job opportunities for this group and for the lower half of a class. They are the ones that really need help.
- 12 I now feel that previous preparation of the administration to provide for the administration would have helped. I experienced some difficulty in scheduling the May test and felt that the administration did not appreciate taking the time out of a busy schedule. If this had been presented to the administration with the original application it would have been much better.
- I feel however that the speakers and organization were excellent.
- 13 I would like to have a few (2 or 3) demonstrations concerning individual students in the area of vocational counseling.

Table 9 (Cont.)

- 14 No specific suggestions for improvement, I like the structure as it is. My only suggestion would be to have more on other areas, ie. group counseling, in-service work with teachers, staffing cases, follow-up and research.
- 15 To perhaps work on specific programs and forms to be used in setting up better information services.
- 16 Tape each session. If the participants are known in advance, a planning session could be required and topics of interest could be selected. By doing this, the speaker could also be given a more structural detail for his preparation.
- 17 Devote one day to group guidance conducted by a professional on the subject of vocational information--lead the students to look at how they feel about it and where they feel they fit.
- Devote one or two sessions to the impact of the Vocational Act of 1963, ESEA, etc., and the surge and direction that Vocational Education is taking in Illinois and the mid-west. Include the Area Vocational School program vs. the Illinois Junior College Programs.
- 18 A pre-session meeting together would be of value so that some individual as well as group planning could precede the workshop.
- 19 The speakers presentations were good but we need to have informal small group discussion with the speaker.

Question V read: What were the specific strengths of this approach to in-service counselor education? In response to this question, 18 participants said that the speakers with the up-to-date factual and practical information were strengths. Five counselors indicated that they felt there was distinct value in meeting with other counselors for the sharing of ideas and discussion. Seven made reference to the organizational or philosophical orientation of the workshop, such as length of time, lack of pressure about grades, its practical approach, etc. Others

commented about specific sessions and the feeling that they were stimulated to do more in their school.

In general, it seems safe to say that the participants felt that the goals of the project were accomplished. In so far as the criterion of satisfaction can be depended upon, it can be said that the workshop succeeded in its goals.

Subjective Evaluation by the Staff of the Participating Schools

The participants were asked to give an evaluation sheet (see Appendix O) to their administrator and to 10 randomly selected teachers in their school. These evaluations were to be placed in sealed envelopes and returned to the director of the workshop. One hundred eighty forms were distributed to teachers in 18 schools, 153 were returned. Seventeen of the 18 administrators returned their forms.

Of the 153 teachers responding, 92% indicated that they were aware of increased efforts to provide educational-vocational information to students in their schools. All (100%) of the administrators indicated they were aware.

The second item asked the respondent to indicate whether they felt these efforts were valuable. Table 10 summarizes the responses.

Table 10

SUMMARY OF STAFF EVALUATION OF INCREASED
INFORMATIONAL SERVICES

Question: If so, (staff member aware of increased informational services), how valuable do you feel these efforts have been?

	Teachers		Administrators	
	N	%	N	%
Considerable Value	40	56	9	53
Some Value	39	28	4	24
Very Little Value	0	0	0	0
Not Worth the Effort	1	0.7	0	0
Detrimental	0	0	0	0
Can't Tell	21	15	4	24
Total	140	100	17	100

It would appear that there were two distinct trends with respect to staff opinions of the increased informational services. First, there was a large majority which felt quite positively about it. Second, there was a substantial group which said they could not evaluate the value. Several written comments on the evaluation sheets suggested that at least some of these staff members felt it was too early yet to evaluate the effectiveness of the increased services.

There were a large number of remarks written on the evaluation sheets. With very few exceptions, these comments were positive. They seemed to convey a sense of appreciation for the efforts of the counselor.

The Effects of the Increased Informational Services on High School Students' Vocational Knowledge

Two approaches were used to measure the effects of increased informational services on students in high school. First, pre and post tests of vocational information were administered to the

students in the participating schools, and to two control schools not participating in the project. The control schools were rural schools with enrollments similar to those of the participating schools. The construction of the test is described in a previous section. Second, a questionnaire was designed to evaluate certain feelings and attitudes of students about their vocational future; it also requested certain demographic information.

The evaluation of changes in vocational knowledge by use of the Career and Vocational Knowledge Test (CVKT) appears below. In all cases, the raw scores on the CVKT were converted to normalized stanine scores. The conversion table and frequency distribution used appears as Appendix P.

The results of administering these tests were analyzed by grade level. One half of the schools administered Form A in the fall, followed by Form B in the spring; for the other schools, the sequence was reversed.

The "simple effect" in these analyses is the result of passage of time from fall to spring for both participating schools and control schools, plus the increased efforts at dissemination of vocational information in the participating schools. The "main effect" is the net change in the means of the participating schools when the change observed in the control schools is subtracted. Table 11 below summarizes the results of the analysis of CVKT scores for ninth graders.

Table 11

MEANS OF CAREER AND VOCATIONAL KNOWLEDGE TEST SCORES
FOR NINTH GRADE STUDENTS IN PARTICIPATING AND CONTROL SCHOOLS

	Mean CVKT Score - Fall	Mean CVKT Score - Spring	Simple Effect	Main Effect	z
Participating Schools					
A - B Sequence	4.54 (N = 643)	4.78 (N = 401)	.24	-.24	-.61
B - A Sequence	4.11 (N = 665)	4.68 (N = 504)	.57	.09	.51
Control Schools					
(B - A Sequence Only; N = 76)	4.64	5.12	.48		

The "simple effect" in both participating and control schools is substantial suggesting considerable growth during the ninth grade. Whether this growth is in vocational knowledge or in ability to take tests, of course, cannot be answered in this study. The "main effect", however, does not favor the participating schools significantly in one case, and in the other case, favors the control school slightly.

The hypothesis of no significant difference in improvement in mean CVKT scores is RETAINED for the ninth grade.

Table 12 below summarizes the results of the analysis of CVKT scores for tenth graders.

Table 12

MEANS OF CAREER AND VOCATIONAL KNOWLEDGE TEST SCORES
FOR TENTH GRADE STUDENTS IN PARTICIPATING AND CONTROL SCHOOLS

Participating Schools	Mean CVKT Score - Fall	Mean CVKT Score - Spring	Simple Effect	Main Effect	z
A - B Sequence	4.91 (N = 721)	5.45 (N = 520)	.54	.15	.63
B - A Sequence	4.92 (N = 587)	5.43 (N = 321)	.51	.12	.32
<u>Control Schools</u>					
(A - A ¹ Sequence N = 65)	5.23	5.62	.39		

It is difficult to determine with certainty, just what the implications of these results are. The fact that the tenth graders in control schools were inadvertently given the same form of the test for both pre and post testing tends to confound the results. (The effect of practice on this test is not known.) It does appear, however, that with a mean change of approximately .5 for the participating schools taking different forms as pre and post tests, that a mean change of only .39 for the control schools on the same test may have important implications. It may be that a Type II error (retaining the null hypothesis when

¹Due to an error in mailing, the control schools were administered Form A at both fall and spring testings.

it is in fact, false) is being made for the 10th grade. The mean spring score for the control schools could logically be expected to be lower had different forms been given.

The hypothesis of no significant difference in improvement in mean CVKT scores is RETAINED for the 10th grade.

Table 13 below summarizes the results of the analysis of CVKT scores for eleventh graders.

Table 13

MEANS OF CAREER AND VOCATIONAL KNOWLEDGE TEST SCORES FOR ELEVENTH GRADE STUDENTS IN PARTICIPATING AND CONTROL SCHOOLS

	Mean CVKT Score - Fall	Mean CVKT Score - Spring	Simple Effect	Main Effect	z
Participating Schools					
A - B Sequence	5.17 (N = 503)	5.75 (N = 313)	.58	.82	2.32
B - A Sequence	5.29 (N = 532)	5.81 (N = 296)	.52	.76	2.04
Control Schools					
B - A Sequence (N = 46)	5.70	5.46	-.24		

The eleventh grade students of the participating schools seemed to make improvements similar to other grades. The situation with the two control schools, however, was substantially different, with the eleventh graders making, on the average, lower scores in the spring than in the fall. The participating schools made significantly greater improvements in CVKT scores than control schools.

The hypothesis of no significant improvement in mean CVKT scores is REJECTED for the eleventh grade ($p < .05$).

Table 14 below summarizes the analysis of CVKT scores for twelfth graders.

Table 14

MEANS OF CAREER AND VOCATIONAL KNOWLEDGE TEST SCORES
FOR TWELFTH GRADE STUDENTS IN PARTICIPATING AND CONTROL SCHOOLS

	Mean CVKT Score - Fall	Mean CVKT Score - Spring	Simple Effect	Main Effect	z
Participating Schools					
A - B Sequence	5.89 (N = 572)	6.63 (N = 370)	.74	.62	1.47
B - A Sequence	5.89 (N = 529)	6.37 (N = 289)	.48	.36	.93
Control Schools					
A - A ¹ Sequence (N = 58)	6.43	6.55	.12		

As with the 10th grade, interpretation of these results is confounded somewhat by the error in administration of the post test to the control group. Nevertheless, there appears to be a trend similar to that observed in the 11th grade. Even with the control students having the advantage of retaking the same form, they did not exhibit the improvements in scores observed in the students in the participating schools. The possibility of a Type II error in the decision to retain the null hypothesis for the 12th grade seems feasible.

The hypothesis of no significant improvement in mean CVKT scores is **RETAINED** for the 12th grade.

In summary, it can be said that in schools where special efforts were made to improve vocational information services, the 11th grade students made significant improvement in their scores on the CVKT over control schools where these efforts were not made. Rigorous statistical interpretation of the effect on 10th and 12th grades does not take into account the fact that the control group had the advantage of retaking the same form of the test. Considering that large differences were found in the 12th grade in spite of this, and that the z's approached significance,

¹Due to an error in mailing, all 12th grade students in control schools were administered CVKT Form A in both fall and spring.

($p < .07$, .18), it may be actually more likely that the hypothesis of no significant effect on 12th graders is also false. A similar, but less convincing, argument could be made for the effect on 10th graders. Students of participating schools consistently improved their CVKT scores from fall to spring, and there is some tendency for this improvement to increase from 9th to 12th grade, while students not exposed to increased informational services make smaller gains as grade level increases.

The Effects of Increased Informational Services on High School Students' Vocational Attitudes

The responses students made to the Career Questionnaire are summarized in Tables 15 through 25 inclusive. Certain limitations to the interpretation of these data should be noted. First, non-continuous data such as this does not lend itself to the same statistical procedures as was used in the case of the CVKT. Second, the control group was reduced to one school by the manner in which the instrument was administered in the other control school. Third, with the data available through machine processing described above, rigorous statistical tests of significance of differences between changes in the participating and control school was not possible. A more rigorous analysis of this data would involve a substantial expenditure of additional personnel time in order to prepare the raw data for treatment.

The responses to each item on the Career Questionnaire are summarized in tables followed by a brief explanation of the results. In order to obtain sufficient numbers in the control groups, all grade levels and in most cases, the sexes, were combined. A X^2 was computed for each table to determine whether there were significant response tendencies related to fall and spring administration of the instrument. The direction and practical importance of these trends can be inferred by inspection of the tables, and is discussed in a later section of this report.

An analysis of responses to Item 1 of the Career Questionnaire appears in Table 15 below.

Table 15

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE- ITEM 1

"The occupation I prefer requires:"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools (* $\chi^2=26.39$)		
Little or No Training	6.7	6.2	+0.5
Some Training	20.6	21.1	-0.5
Apprenticeship	5.4	5.4	0.0
Trade or Technical School	18.1	21.1	-3.0
College Degree	25.5	25.8	-0.3
Graduate Study	14.2	13.7	+0.5
Don't Know	9.6	6.7	+2.9
Total N	3549	3258	
	Control Schools ($\chi^2=10.79$)		
Little or No Training	8.8	4.6	+4.2
Some Training	22.4	15.6	+6.8
Apprenticeship	2.4	5.5	-3.1
Trade or Technical School	22.4	26.6	-4.2
College Degree	19.2	28.4	-9.2
Graduate Study	21.6	12.8	+8.8
Don't Know	3.2	6.4	-3.2
Total N	125	109	

*In this report, the symbol χ^2 will be used for chi square.

The students who indicated a vocational preference marked Item 1, indicating the kind of training or education they thought this preference would require. There were reliable differences between the responses given by students in participating schools in the fall and those given in the spring. Students in the control schools seemed to change their responses, also. However, the result was not statistically significant ($p < .10$). The students in participating schools made the largest changes by an increase in the percent selecting "technical or trade school education", and a decrease in the percent saying "I don't know". No statistically significant changes were found in the control school. (The technical and trade school trend was noticeable in the control school, also; however, in this school there was an increase in the percent saying "I don't know".)

An analysis of responses to Item 2 of the Career Questionnaire appears in Table 16 below.

Table 16

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 2

"Which reason do you think is most important to you in choosing a career or occupation?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
Participating Schools ($\chi^2=9.08$)			
Liking	68.7	71.0	-2.3
Pay	4.5	4.6	-0.1
Success	15.3	14.3	+1.0
Ability	9.2	7.8	+1.4
Status	1.7	1.3	+0.4
Please Others	0.7	1.0	-0.3
Total N	3678	3250	
Control Schools ($\chi^2=0.20$)			
Liking	65.9	68.1	-2.2
Pay	8.7	7.8	+0.9
Success	9.5	12.9	-3.4
Ability	7.1	4.3	+2.8
Status	5.6	4.3	+1.3
Please Others	3.2	2.6	+0.6
Total N	126	116	

Students were asked what the most important reason would be for them in selecting an occupation. No significant changes in this attitude were observed for the students in either the participating or the control schools.

An analysis of responses to Item 3 of the Career Questionnaire appears in Table 17 below.

Table 17

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 3

"How certain are you that this choice is what you really prefer?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
Participating Schools ($\chi^2=8.24$)			
Very Doubtful	2.5	2.8	-0.3
Somewhat Doubtful	11.4	10.2	+1.2
Fairly Certain	32.0	29.7	+2.3
Somewhat Certain	28.6	29.5	-0.9
Very Certain	25.6	27.5	-1.9
Total N	3564	3168	
Control Schools ($\chi^2=0.99$)			
Very Doubtful	1.6	0.9	+0.7
Somewhat Doubtful	12.0	11.4	+0.6
Fairly Certain	33.6	30.7	+2.9
Somewhat Certain	23.2	26.3	-3.1
Very Certain	29.6	30.7	-0.5
Total N	125	114	

In Item 3, students were asked how certain they were that they really preferred the choice they gave. No significant changes in the distribution of responses to this item were observed in either the participating or the control schools. When the ratings were treated as continuous numerical data, no significant difference in changes in means between participating schools and control schools was found ($z = 0.29$).

An analysis of responses to Item 4 of the Career Questionnaire appears in Table 18 below.

Table 18

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE- ITEM 4

"If I had my choice, I would like to live:"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools ($X^2=5.56$)		
Right Here	27.8	26.0	+1.8
Small Community	22.0	24.1	-2.1
Large City	13.0	12.6	+0.4
Wherever Necessary	37.2	37.4	-0.2
Total N	3666	3243	
	Control Schools ($X^2=0.76$)		
Right Here	20.8	22.9	-2.1
Small Community	13.8	12.7	+1.1
Large City	10.0	12.7	-2.7
Wherever Necessary	55.4	51.7	+3.7
Total N	130	118	

In Item 4, students were asked to indicate their preference of where to live. No significant changes in the pattern of responses to this item were observed in either the participating or control schools.

Analysis of responses to Item 5 of the Career Questionnaire appears in Table 19 below.

Table 19

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE- ITEM 5

"The kind of occupation I think I will most likely enter, requires:"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools ($\chi^2=21.43$)		
Little or No Training	10.4	10.0	+0.2
Some Training	21.8	22.1	-0.3
Apprenticeship	6.2	6.3	-0.1
Trade or Technical School	19.2	21.3	-2.1
College Degree	24.0	24.7	-0.7
Graduate Study	10.0	9.6	+0.4
Don't Know	8.5	5.8	+2.7
Total N	3394	3248	
	Control Schools ($\chi^2=8.26$)		
Little or No Training	11.2	5.1	+6.1
Some Training	22.4	23.1	-0.7
Apprenticeship	9.6	3.4	+6.2
Trade or Technical School	20.8	23.9	-3.1
College Degree	24.8	28.2	-3.4
Graduate Study	6.4	8.5	-2.1
Don't Know	4.0	7.7	-3.7
Total N	125	117	

In Item 5, students were to indicate the training they thought was required for the occupation they thought they would probably enter. A significantly different pattern of response was noted between the fall and spring administration in the participating schools. The patterns in the control schools were not significantly different, however. (Changes in patterns were similar to the changes in Item 1, which referred to preferred choice rather than probable occupation.)

Difficulties in machine scoring made it impossible to analyze the response to Item 6 at this time.

An analysis of responses to Item 7 of the Career Questionnaire appears in Table 20 below.

Table 20

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 7

"How Certain are you that you will enter the vocation you named in "B" above?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
Participating Schools ($X^2=13.50$)			
Very Doubtful	2.2	2.1	+0.1
Somewhat Doubtful	6.8	6.4	+0.4
Neither Certain Nor Doubtful	26.8	23.2	+3.6
Somewhat Certain	41.8	43.7	-1.9
Very Certain	22.3	24.7	-2.4
Total N	3110	3014	
Control Schools ($X^2=6.80$)			
Very Doubtful	3.4	0.0	+3.4
Somewhat Doubtful	8.5	5.5	+3.0
Neither Certain Nor Doubtful	30.0	24.8	+5.2
Somewhat Certain	34.7	36.7	-2.0
Very Certain	23.7	33.0	-9.3
Total N	118	109	

In Item 7, students were to indicate the degree of certainty they felt regarding the occupation they would probably enter. A significant change in pattern of responses was noted for the students in participating schools, while a similar change in the control school was not significant. More students in both groups tend to be "certain" or "very certain" of their probable occupation in the spring than in the fall. When the ratings were treated as continuous numerical data, no significant difference in changes in means between participating schools and control schools was found ($z = 0.697$).

An analysis of responses to Item 8 of the Career Questionnaire appears in Tables 21 and 22 below.

Table 21

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 8-BOYS

"I think I will probably live:"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools ($\chi^2=27.50$)		
Here	28.7	31.1	-2.4
Small Community	19.0	24.2	-5.2
Large City	9.5	10.2	-0.7
Wherever Necessary	42.8	34.5	+8.3
Total N	1696	1436	
	Control Schools ($\chi^2=4.48$)		
Here	18.8	24.6	-5.8
Small Community	17.2	5.3	+11.9
Large City	10.9	10.5	+0.4
Wherever Necessary	53.1	59.6	-6.5
Total N	64	57	

Table 22

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE- ITEM 8-GIRLS

"I think I will probably live:"

Percent of Students Choosing Each Response	Fall	Spring	Difference
Participating Schools ($X^2=9.12$)			
Here	15.3	13.4	+1.9
Small Community	12.2	13.3	-1.1
Large City	12.3	11.0	+1.3
Wherever Necessary	29.0	27.4	+1.6
Follow Husband	31.2	35.0	-3.8
Total N	1954	1605	
Control Schools ($X^2=3.37$)			
Here	7.4	14.3	-6.9
Small Community	11.8	5.4	+6.4
Large City	10.3	7.1	+3.2
Wherever Necessary	45.6	44.6	+1.0
Follow Husband	25.0	28.6	-3.6
Total N	68	56	

In Item 8, the students were asked to indicate where they probably would live. A significant tendency for a different pattern of responses between spring and fall was observed in the boys of participating schools. A different, but non-significant change was noted in the boys in the control school. A distinct tendency for more boys to indicate a probability of living in a small community, particularly a different one, and fewer boys to indicate that they would go wherever they needed to to get a job was noted in the spring for the participating schools. In the control school, the change (not significant) was reversed.

For girls, no significant change in the pattern of responses was found in either group of students.

An analysis of responses to Item 9 of the Career Questionnaire appears in Table 23 below.

Table 23

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 9

"How do you feel now about how much you know about jobs and careers?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools ($\chi^2=119.57$)		
Very Little	16.7	10.6	+6.1
A Little	23.6	18.3	+5.3
Some	45.9	51.5	-5.6
Almost Enough	9.4	12.3	-2.9
Enough	4.3	7.2	-2.9
Total N	3695	3257	
	Control Schools ($\chi^2=5.94$)		
Very Little	19.0	18.6	+0.4
A Little	32.6	22.0	+10.6
Some	35.6	37.3	-1.7
Almost Enough	7.6	11.0	-3.4
Enough	5.3	11.0	-5.7
Total N	132	118	

In Item 9, students were asked how they felt about how much they knew about jobs and careers. There was a significant difference in the pattern of responses of the students in the participating schools between the spring and fall administrations. A similar, but non-significant difference in pattern of responses was found in the control schools. The trend was for a larger percentage of students in the spring to indicate they had enough or almost enough information. When these ratings were treated as continuous numerical data, no difference in mean changes of ratings was found between the participating and control schools ($z = 1.11$).

An analysis of responses to Item 10 of the Career Questionnaire appears in Table 24 below.

Table 24

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE- ITEM 10

"What do others (parents, relatives, and friends) think of your plans for the future?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
Participating Schools ($\chi^2=14.26$)			
Strongly Favor	21.3	23.8	-2.5
Favor	44.0	42.7	+1.3
Neutral	25.5	25.3	+0.2
Disapprove	3.5	3.9	-0.4
Strongly Disapprove	1.0	.8	+0.2
Don't Care	4.7	3.4	+1.3
Total N	3653	3238	
Control Schools ($\chi^2=7.57$)			
Strongly Favor	20.9	27.4	-6.5
Favor	46.5	39.3	+6.2
Neutral	25.6	23.9	+1.7
Disapprove	1.6	4.3	-2.7
Strongly Disapprove	1.6	1.7	-0.1
Don't Care	3.9	3.4	+0.5
Total N	129	117	

In Item 10, students were asked to indicate what they thought others (parents, relatives, and friends) thought of their plans for the future. In the spring, a significant trend for more students to indicate that others "strongly approve" of their ideas

was found in the participating schools. A similar, but non-significant trend was noted in the control schools.

An analysis of responses to Item 11 of the Career Questionnaire appears in Table 25 below.

Table 25

SUMMARY OF STUDENTS' RESPONSES TO CAREER QUESTIONNAIRE-ITEM 11

"How do you feel about your vocational future?"

Percent of Students Choosing Each Response	Fall	Spring	Difference
	Participating Schools ($\chi^2=7.95$)		
Worry a Great Deal	11.1	12.2	-1.1
Worry Some	24.2	26.5	-2.3
Think Some About It	30.5	30.6	-0.1
Come Out All Right	32.5	29.0	+3.5
Don't Care	1.6	1.7	-0.1
Total N	1758	3255	
	Control Schools ($\chi^2=1.68$)		
Worry a Great Deal	13.8	16.0	-2.2
Worry Some	23.4	24.4	-1.0
Think Some About It	37.2	29.4	+7.8
Come Out All Right	24.5	28.6	-4.1
Don't Care	1.1	1.7	-0.6
Total N	94	119	

In Item 11, students were asked how they felt about their vocational future. No significant differences in patterns of students' responses were found for either group of students.

In summary, it can be said that patterns of answers to several of the questions on the Career Questionnaire do seem to be different between fall and spring administrations. Usually the trends observed in the participating schools are similar to the trends observed in the control schools.

With the possible exception of Item 8, there is a strong indication that the differences in patterns of responses between the fall and spring administrations is a natural change from fall to spring, a seasonal difference in attitude, or some other general factor not related to the experimental variable. The X^2 's for control schools usually indicated no significant difference in patterns of responses between spring and fall, while several significant X^2 's were found for participating schools. It seems probable from inspection of the patterns that several Type II errors (retaining false hypothesis) were made in the case of control schools (due to the low power of the chi square to detect differences with smaller samples).

No conclusive statement can be made about the effect of the project on students' attitudes. The evidence, however, points to the probability of no measured effect. That is, observed changes probably are not due to the increased informational services, but rather to a general tendency for students to answer questions like this differently in the spring as compared with the fall.

DISCUSSION

This project involved experimentation with a specific approach to in-service education for counselors. In addition, certain techniques for evaluation of the effect of increased educational and vocational informational services on high school students were developed and employed.

Subjective evaluations by counselors tended to support this approach to in-service education. Generally, the counselors were favorable to the workshop and felt that it was of value.

A vocational knowledge test and a career questionnaire were developed and administered to most students in the participating schools as well as two control schools. These instruments seem to be of some value in assessing students' vocational knowledge and concerns. In particular, the Career and Vocational Knowledge Test seems to have some promise for being a valuable instrument for further research.

Students in the participating schools were probably significantly affected as measured by the CVKT, although few, if any, corresponding changes were detected by the Career Questionnaire.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Conclusions

The workshop in educational-vocational information was deemed a success by the participating counselors. They indicated that it increased their fund of knowledge and stimulated them to initiate more information services in their respective high schools. Most of the staff of the participating schools indicated they were aware of increased informational services being initiated in their school.

One unintentional value was the interaction between the various counselors throughout the period of the project. Several informal comments to the director indicated that some of the counselors valued this part of the experience very highly.

Students in participating schools do seem to improve their scores on a specially constructed vocational knowledge test over the changes made by students in control schools. Fall to spring mean changes were significantly greater in participating schools for the eleventh and twelfth grades. These results may have attitudinal implications, however, as the mean change in the eleventh grade of one control school was negative.

Pre and post administrations of the Career Questionnaire showed substantial changes in students' attitudes about their future from fall to spring. However, when these changes are compared with pre and post measures from control schools, it appears that most of these changes in attitude are a function of passage of time, time of the school year, or some variable other than the experimental condition.

Implications

Some of the implications which may be drawn from this project are related to the value of the in-service training approach to up-grading rural counselors; other implications are related to the effect of information services on students.

In view of the positive effect of this workshop on the counselors and the schools' guidance programs it seems likely that universities and U. S. O. E. can be an important influence on guidance through short-term workshops. Scheduling a short workshop just prior to the opening of school in the fall may be a way of stimulating guidance activities in rural schools where the counselors often are minimally prepared and not pursuing further

training. In this case, involvement of the students and teachers in certain evaluation procedures also served to focus attention to guidance.

The measurement of vocational knowledge with an objective test met with some success. Students seem to improve their scores from fall to spring and there are reliable grade level differences. In this experiment, the students of participating schools showed greater mean improvements than did students in control schools. If the Career and Vocational Knowledge Test is a valid measure of vocational knowledge, then it seems defensible to say that at least in the eleventh and twelfth grades, students were significantly affected by the project.

With respect to certain opinions and attitudes surveyed by the Career Questionnaire, very few changes could be attributed to the project. While a number changed their attitudes from fall to spring, this seemed to occur in control schools as well. The attitudinal changes as measured in this project then seem to be independent of any influence the project might have had on them.

Inasmuch as it appears possible to increase students' knowledge of vocations through special effort, we can then turn to the question: "Does this increased fund of knowledge seem to matter?" There are at least two sources of information about a possible answer to this question. First, the staff in the schools were asked to give their opinion about the value of these increased efforts. Second, the Career Questionnaire was administered to students in order to assess changes in their attitudes which might be attributed to the project.

The criterion of staff evaluation strongly favored these being at least "some value" in the increased guidance services (see Table 7). However, in view of the tendency of people to rate things highly on a scale, and the large number (15%) saying they could not tell whether the services were of value, it might be concluded that as a group they were not really very enthusiastic (only 56% said they thought it was of "considerable value") about the value of the increased information services.

The criterion of change in students' attitudes is also difficult to evaluate. Consistent differences in fall and spring administrations of the Career Questionnaire were observed. However, the reasons for these differences are not clear. There is evidence to suggest that these differences also were evident in the control sample.

In summary, there seems to be clear evidence that increased efforts can create changes in vocational knowledge, but there is almost no evidence that the increased knowledge is associated with any changes in attitudes. More extensive analysis of the data might lead to more conclusive evidence in this area. For the present, however, the implication here is that if counselors make efforts to increase factual knowledge about vocations among their students, they will become more knowledgeable about vocations, without this affecting students' attitudes or feelings about their vocational future. Rectenwalds' findings in 1946 (7) referred to earlier in this report were not substantiated.

On the assumption that vocational behavior, like any other behavior, will be the result of an interaction of cognitive perception and knowledge (of vocational information) and an affective condition (feelings about self and vocations) we become concerned in vocational guidance about the relationship of these two components. If we assume that students will be benefitted (behaviorally) by knowing more about vocations, then the project probably had an important impact. On the other hand, students' attitudes and feelings are probably important also in determining vocational behavior, and there is doubt about whether the project had any measurable effect during this school year on this aspect of students' development.

Recommendations

A subjective interpretation of the evaluation of this attempt at in-service training of counselors is that it is effective in developing counselors' and students' vocational knowledge. It is recommended that similar approaches be developed for in-service education of counselors. The method of utilizing consultants in various occupational and educational specialties was adjudged a valuable technique for this purpose. The short-term workshop scheduled immediately prior to the opening of schools in the fall is also adjudged a valuable procedure. One recommendation for a planning meeting of enrollees in the spring during which time the topics, consultants and procedures could be planned for the August meetings seemed to be a valuable suggestion. The follow-up meetings on Saturdays were met with varying enthusiasm, and may not be as valuable as the continuous session except for the special purposes of this project. In general, these procedures are recommended for future in-service training of counselors.

The measurement of vocational knowledge is an area of investigation which may warrant further investigation. The two 70-item tests of vocational knowledge should be tested further to determine the value of such testing in research and/or guidance.

The measurement of vocational attitudes poses both conceptual and practical difficulties as discovered in this project. It may be that further investigation into this topic will suggest more realistic guidance practices. The hint of mental health implications in vocational adjustment found in the students' responses to Item 11 of the Career Questionnaire, suggests that counselors are faced with a problem involving a large percentage of students who have intense feelings about their vocational future. The measurement of vocational attitudes should be explored further.

In view of the doubt about information effecting changes in vocational attitudes among students, it is suggested that future in-service (and pre-service) education of counselors not only include training in informational efforts but also techniques for dealing with students feelings and attitudes. This is supported by the finding that 36% of boys and 42% of girls in these rural high schools say they worry either "some" or "a great deal" about their future (see Table 25). With this condition, counselors have what amounts to a mental health problem interacting with the problem of vocational guidance. Specific efforts should be made to help practicing counselors develop effective counseling and guidance procedures which will be of assistance to students whose guidance needs are not met by the acquisition of vocational knowledge. Future U. S. O. E. grants might be directed towards the specific need to develop the competency of counselors in dealing with the affective component of vocational adjustment.

SUMMARY

A two-week workshop in educational-vocational information was held for twenty rural guidance workers in August, 1966. This workshop was designed to up-date counselor's knowledge of vocational information and to encourage the development of increased informational services in the respective high schools.

The technique of utilizing consultants from various vocational areas to better inform counselors was rated highly by the counselors. In each high school, some new or additional technique for dissemination of vocational information was implemented. Staff members in the respective schools indicated they were aware of these increased efforts.

A Career and Vocational Knowledge Test and a Career Questionnaire were developed during the workshop. These instruments were administered in the fall (pre-test) and in the spring (post-test) of the 1966-67 school year to students in the participating high schools and in two rural control schools.

The eleventh grade students in the participating schools made significantly more improvement in their CVKT scores than did the students in the control schools. There is a suggestion that twelfth graders may also have done this. Few significant and no important differences in changes in answers to the Career Questionnaire were noted.

It was concluded that significant improvements in vocational knowledge of high school students are made when increased informational services are implemented. No measurable effect on students' attitudes was found to accompany this increased knowledge, however. This suggests that counselors must also increase efforts to deal with attitudes if attitudes are to be affected.

It is recommended that short-term workshops as a technique for in-service education of counselors be explored more thoroughly. The use of consultants from various vocational areas seems to be an effective way of dealing with the informational needs of counselors. It is further recommended that future workshops include training in methods of dealing with the affective component of vocational development.

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APPENDIXES

APPENDIX A

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP
FOR RURAL GUIDANCE WORKERS

1966 - 1967

Steering Committee

Dr. K. Norman Severinsen
Associate Professor of Education
Western Illinois University
Macomb, Illinois

Dr. John S. Storey
Professor of Education
Western Illinois University
Macomb, Illinois

Mrs. Josephine Johnson
Director of Guidance
Bushnell-Prairie City Community Unit #170
Bushnell, Illinois

Mr. James W. Smith, Chief
Vocational Guidance Services
Board of Vocational Education and Rehabilitation
Office of the Superintendent of Public Instruction
Springfield, Illinois

APPENDIX B - 1

WESTERN ILLINOIS UNIVERSITY

County Superintendents:

These materials are being mailed to administrators in west central Illinois, and a few Missouri and Iowa schools.

I have included county superintendents in our mailing primarily for their information. Any general assistance you can give me on publicity will be appreciated. The lateness of the date makes it difficult to assure complete coverage.

Thank you.

K. Norman Severinsen
Associate Professor

KNS:alm

APPENDIX B - 2

WESTERN ILLINOIS UNIVERSITY

Superintendents:

Please see that your guidance counselors get this information. I feel that it will be a very valuable program, and would encourage them to consider applying.

Thank you.

K. Norman Severinsen
Associate Professor

KNS:alm

2 mg 1

APPENDIX B - 3

WESTERN ILLINOIS UNIVERSITY

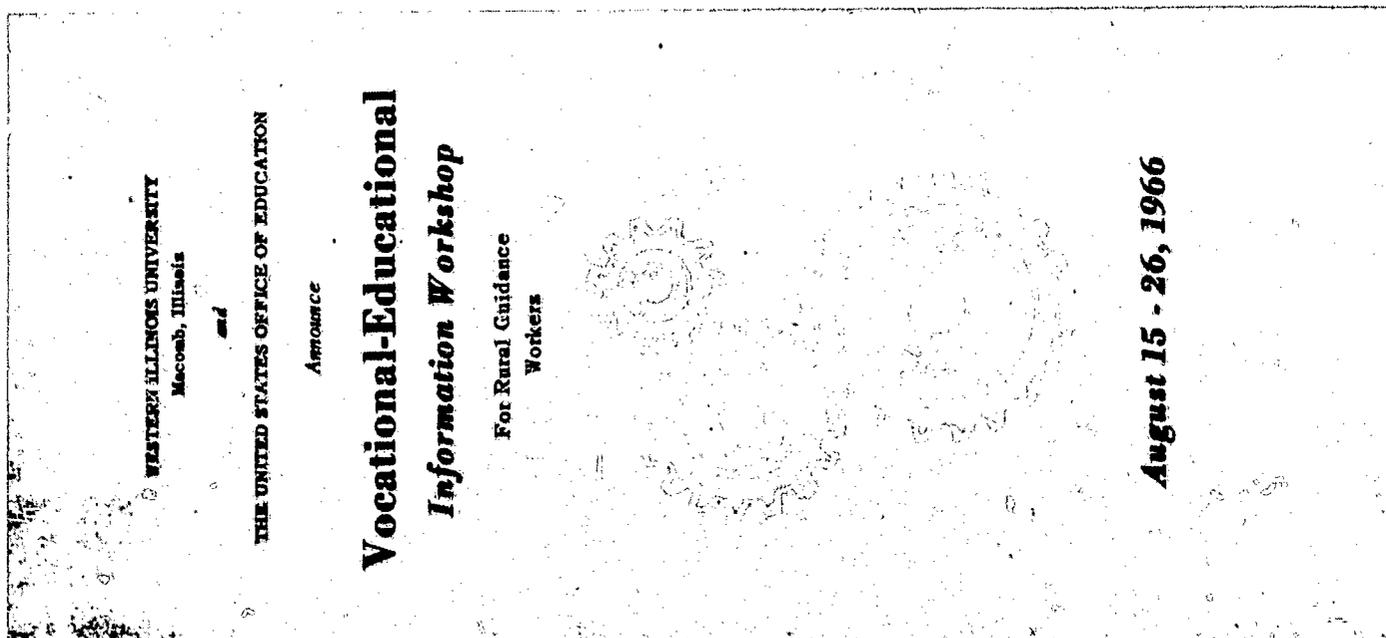
Principals:

Please be sure your counselors get the enclosed materials. I encourage you to discuss the program with them, it may contribute significantly to your guidance program.

Thank you.

K. Norman Severinsen
Associate Professor

KNS:alm



VOCATIONAL-EDUCATIONAL
INFORMATION WORKSHOP
Western Illinois University
Macomb, Illinois 61455

Bulk Rate
U.S. POSTAGE
PAID
Macomb, Illinois
Permit No. 489

Non-Profit Organization

Please Post

- essional preparation and experience.
2. Potential for improvement and growth in the school's information services.
 3. Potential for the most direct benefit to rural secondary school students.

These criteria are predicated on the cooperation of the secondary school, the participant and the director of the institute. That is, there must be evidence of a need for the program on the part of the guidance worker as well as the school, and evidence that they will work cooperatively to provide a better program of information for the students.

Selections will be entirely without regard to race, color or creed, or national origin.

STIPENDS

Participants in this program will be exempt from all tuition and other regularly required fees. They are also eligible, upon application, to receive a weekly stipend of \$75.00 plus an allowance of \$15.00 for each dependent for each week of the institute.

Participants must provide their own travel to and from the institute itself, although travel allowances will be made for the drive-in conference. Most supplies and materials will be supplied. However, the participants may be asked to purchase their own books and personal supplies.

APPLICATION

Application forms should be obtained from:

Dr. K. Norman Severson, Director
Vocational-Educational Information
Workshop

Western Illinois University
Macomb, Illinois 61455
Phone 899-3324

Completed applications must be returned postmarked not later than May 20, 1966. Invitations to the workshop will be mailed as soon as possible after this date.

plan. Participants from other states should consult their respective state departments of public instruction for applicability in their state.

FACILITIES

Instructional
Air-conditioned library, classroom, and dormitory facilities will be available for the institute. Ample space for individual and small-group meetings will be available in air-conditioned buildings.

Recreational
All recreational facilities ordinarily available to students will be available to participants and their families. These include an air-conditioned university union with snack bar, game room, television, lounges, and a golf course (green fee 25¢).

Housing
Participants may reside in air-conditioned residence halls, or make arrangements in the community for residence. Commuting long distances is not recommended.

Anticipated charges for residence hall living are as follows:
Room and Board (two weeks)
\$63.00 single occupancy
\$54.00 double occupancy
Families are welcome; however, the residence hall facilities are not ideal for small children.

ELIGIBILITY

To be eligible for this workshop, a person must have some formal guidance responsibilities during the 1966-67 school year, and the administration of his school must certify that increased information services are needed and will be permitted during the 1966-67 school year.

Candidates will be chosen on the basis of the following priority criteria:

1. Qualifications of the applicant based on pro-

Steering Committee
Dr. John S. Storey, Professor of Education and Coordinator of Counseling and Testing Services, Western Illinois University.

Mr. James W. Smith, Chief, Vocational Guidance Services, Board of Vocational Education and Rehabilitation, Illinois.

Mrs. Josephine Johnson, Director of Guidance, Bushnell-Prairie City Public Schools.

Keynote Address
Dr. E. B. Hoyt, Professor of Education, Director of Specialty Oriented Student Project, University of Iowa, and President, American Personnel and Guidance Association.

Consultants
Appropriate personnel in various specialties will be present to provide information regarding their area. The following topics will be included:

1. Technical education
2. Building trades
3. Manufacturing trades
4. Aviation and related occupations
5. Cosmetology
6. Business education
7. Retail occupations
8. Banking and related occupations
9. Data processing
10. Agriculturally related occupations
11. College advising
12. Law occupations
13. Medicine and related occupations
14. Dentistry and related occupations
15. Opportunities for liberal arts graduates
16. State employment services
17. Private placement agencies

ACADEMIC CREDIT

Participants may enroll in Education 450G - Vocational-Educational Information Workshop for Rural Guidance Workers, and receive 3 quarter hours of graduate credit.

This credit may contribute to, but not substitute for, credit in Area 5 under the Illinois certification



APPENDIX D

WESTERN ILLINOIS UNIVERSITY
in cooperation with
THE UNITED STATES OFFICE OF EDUCATION

Announces

WORKSHOP
VOCATIONAL-EDUCATIONAL INFORMATION
for Rural Guidance Workers

A TWO-WEEK WORKSHOP FOR COUNSELORS AT WESTERN ILLINOIS UNIVERSITY
(Education 450G - 3 quarter hours credit).

Hear and talk to specialists on the following topics:

Technical education	Agriculturally related occupations
Building trades	College advising
Manufacturing trades	Law occupations
Aviation and related occupations	Medicine and related occupations
Cosmetology	Dentistry and related occupations
Business education	Opportunities for liberal arts graduates
Retail occupations	State employment services
Banking and related occupations	Private placement agencies
Data processing	

Learn about ways of disseminating this information to your students

ELIGIBILITY:

Any counselor in a secondary school will be eligible to apply. Priority will be given to those whose selection will tend to improve information services for rural youth the most.

STIPENDS:

Each enrollee will receive \$75.00 per week plus \$15.00 for each dependent.

AUGUST 15 - 26, 1966

FOR APPLICATION FORMS OR INFORMATION WRITE:

Dr. K. Norman Severinsen, Director
Vocational-Educational Information Workshop for Rural Guidance Workers
Western Illinois University
Macomb, Illinois 61455

APPENDIX E - 1

Application Form (Participants)

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP FOR RURAL GUIDANCE WORKERS

WESTERN ILLINOIS UNIVERSITY

(Authorized under Section 4C of the Vocational Education Act of 1965)

Instructions:

1. You must complete all sections of this form.
2. This application must be postmarked not later than May 20, 1966. (Invitations will be mailed as soon as possible after this date.)
3. This application must be mailed separately from the school form.

I. Personal Data:

Name of Applicant Mr.
Miss _____ (Last) (First) (Middle)

Address:

Present _____ Phone No. _____

School _____ Phone No. _____

Summer _____ Phone No. _____

Marital Status (Circle One) Single Married

Birth Date _____

Dependents

<u>Name</u>	<u>Age</u>	<u>Relationship</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

II. Educational History:

<u>A. Institution</u>	<u>Degree or Hours Credit</u>	<u>Dates of Attendance</u>	<u>Major</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

APPENDIX E - 3

V. Describe what you expect your duties will be during the next school year (1966-67). Include proportion of time to be spent in guidance.

VI. May we contact your previous employers as references? _____

VII. May we contact a placement agency for up-to-date credentials? _____

If so, where? _____

I certify that the above statements are true and accurate to the best of my knowledge.

Signature _____

Return application form to: Dr. K. Norman Severinsen
Western Illinois University
Macomb, Illinois 61455

APPENDIX H - 1

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP
FOR RURAL GUIDANCE WORKERS

List of Participants

Name	School
Armond A. Borchardt	Durant Community School, Durant, Iowa
Philip E. Eshleman	Aledo High School, Aledo, Illinois
Mae Y. Griffin	Cuba High School, Cuba, Illinois
Glenna L. Griffith	Morrisonville High School, Morrisonville, Illinois
Fred Howell	Canton High School, Canton, Illinois
James I. Johnson	J. D. Darnall High School, Geneseo, Illinois
Cecil F. Jones	Brimfield High School, Brimfield, Illinois
Walter R. Jones, Jr.	Northwestern High School, Sciota, Illinois
Virginia B. Keller	Toulon High School, Toulon, Illinois
Paul F. Ketner	Rockridge Community Unit #300, Taylor Ridge, Illinois
John McCullers	Mason City Unit 123, Mason City, Illinois
Marilyn A. Moon	Colchester High School, Colchester, Illinois
Truman Nehls	Alwood High School, Woodhull, Illinois
Helen O'Connor	Davenport Community District, Walcott School, Walcott, Iowa
Gary Parmelee	Chillicothe High School, Chillicothe, Illinois

APPENDIX H - 2

Lyle H. Schoenwetter	V.I.T. High School, Table Grove, Illinois
Thomas A. Springer	Winchester High School, Winchester, Illinois
John R. Talbot	Tampico High School, Tampico, Illinois
Orell R. Vanderwater	Springfield Public Schools, Springfield, Illinois
Genevieve Warfield	Cuba High School, Cuba, Illinois

APPENDIX I - 1

WESTERN ILLINOIS UNIVERSITY

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP FOR RURAL GUIDANCE WORKERS

August 15 - 26, 1966

K. Norman Severinsen, Director

Program Schedule:

Monday, August 15, 1966

- 9:00 - 10:30 a.m. - Room 127, Sherman Hall
Participants report and register.
- 11:00 a.m. - Room 103, Science Hall
Welcome--Dean F. P. Abel, School of Education
Orientation meeting--Dr. K. Norman Severinsen, Workshop
Director
- 1:30 - 2:30 p.m. - Keynote Address: Correcting Deficiencies in Occupational
Educational Information--Dr. K. B. Hoyt, Professor of
Education, State University of Iowa, President,
American Personnel and Guidance Association, Director
of Specialty Oriented Student Research Program, The
University of Iowa--Room 103, Science Hall
- 3:00 - 4:00 p.m. - Room 103, Science Hall
Vocational Guidance Services at the State Level.
Mr. James Smith, Chief, Vocational Guidance Service
Vocational and Technical Division, Board of Vocational
Education and Rehabilitation, State of Illinois

Tuesday, August 16, 1966

- 9:00 a.m. - Room 103, Science Hall
Illinois State Employment Service: Its Services to Youth.
Ada Mostcovy, Supervisor, Services to Youth, Illinois State
Employment Service
- 1:00 p.m. - Room 103, Science Hall
How Commercial Placement Agencies Can be of Service to Youth.
Mr. William C. Murphy, Chairman, Ethical Standards and
Practices Committee, Illinois Employment Association

Wednesday, August 17, 1966

- 9:00 a.m. - Room 103, Science Hall
Evaluation of Technical Training for High School Graduates.
Miss Kathryn Ford, Executive Assistant to Director, Illinois
Department of Registration and Education
- 1:00 p.m. - Room 103, Science Hall
Educational Opportunities in Technology for High School
Graduates. Dr. M. Keith Humble, Director, Vocational
Technical Institute, Southern Illinois University

APPENDIX I - 2

Thursday - August 18, 1966

- 9:00 a.m. - Room 103, Science Hall
Apprenticeship Opportunities for High School Graduates in
Machinists Trades. Mr. Lee Chapman, Grand Lodge Representative
International Association of Machinists and Aerospace Workers
- 1:00 p.m. - Room 103, Science Hall
Apprenticeships for High School Graduates. Mr. Ray Davis,
Field Representative, U.S. Department of Labor, Bureau of
Apprenticeship and Training, Springfield, Illinois

Friday, August 19, 1966

- 9:00 a.m. - Room 103, Science Hall
Advising Students on College Selection and Admissions.
Dr. James Williams, College Counselor, Glenbard West High
School, Glen Ellyn, Illinois
- 1:00 p.m. - Room 103, Science Hall
Financial Aids for College Students. Mr. Herman Koester,
Financial Aids Officer, Western Illinois University

Monday, August 22, 1966

- 9:00 a.m. - Room 103, Science Hall
Semi-Technical Education in Agriculturally Related Occupations.
Mr. Edward Fitzgibbon, Sr., Head, Department of Agri-Business,
Canton, Illinois
Observer: Dr. H. W. Houghton, Chief, Counselor Preparation
Section, U.S. Office of Education
- 1:00 p.m. - Room 103, Science Hall
Opportunities for High School and College Graduates in
Agriculturally Related Occupations. Dr. Arlon E. Elser,
Acting Head, Department of Agriculture, Western Illinois
University

Tuesday, August 23, 1966

- 8:00 a.m. - Field Trip: Gale Products, Galesburg, Illinois.
a) Observation of manufacturing processes.
b) Discussion with personnel manager.

Wednesday, August 24, 1966

- 9:00 a.m. - Room 103, Science Hall
Opportunities in Data Processing. Representative of
International Business Machines
- 1:00 p.m. - Evaluation of Secretarial and Business Training Opportunities
for High School Graduates. Mr. Robert Egan, State Supervisor
of Private Business Schools, State of Illinois
Room 103, Science Hall

APPENDIX I - 3

Thursday, August 25, 1966

- 9:00 a.m. - Room 103, Science Hall
Career Opportunities for College Graduates With Liberal Arts
and Non-Technical Majors. Mr. W. R. Clement, Regional
Assistant, Montgomery Ward and Company
- 1:00 p.m. - Room 103, Science Hall
Career Opportunities for College Graduates With Scientific and
Technical Majors. Mr. Robert Crowe, Personnel Supervisor,
Iowa Ordnance Plant, Burlington, Iowa

Friday, August 26, 1966

- 9:00 a.m. - Room 407, Applied Sciences Building
Conducting Local Surveys of Employment Opportunities.
Mr. David Gross, Corplan Associates, Chicago, Illinois
- 1:00 p.m. - Room 407, Applied Sciences Building
Summary and Planning Session. Dr. K. Norman Severinsen,
Workshop Director

APPENDIX J

WESTERN ILLINOIS UNIVERSITY

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP FOR RURAL GUIDANCE WORKERS

Evaluation of Individual Workshop Sessions

Session _____ Name _____

Date _____

Please give your candid opinion.

I. How important do you feel this topic is for school counselors?

- a) Critical importance
- b) Very important
- c) Important
- d) Not very important
- e) Very little importance

Explain:

II. How did this speaker impress you?

- a) He irritated me considerably
- b) He irritated me some
- c) I felt pretty neutral about him
- d) I felt positively about him
- e) I felt very positive about him

Explain:

III. About what the speaker said: (Mark as many as apply.)

- a) It was mostly repetition of what I already know
- b) He didn't seem to have much to say
- c) It was reasonably informative
- d) He had a great deal of information to give
- e) I learned a great deal that I hadn't known before

Explain:

IV. Has this session raised any new questions, ideas, or opened up any new areas you hadn't thought of before? Explain briefly.

APPENDIX K - 1

TEST OF CAREER AND VOCATIONAL KNOWLEDGE

Instructions:

This is a questionnaire to determine how much high school students know about jobs. It is different from most tests in several ways.

First, you will be interested to see that there are so many kinds of vocations to know about.

Many of you have taken multiple choice tests before in which you were asked to make the best choice you could out of four or five possible answers. Since your score was the number you got right, you naturally wanted to get as many right as possible. You may have guessed even if you were pretty unsure about the right answer. This is the second way in which this test is different. In this test, you do not have to guess if you do not know the answer.

The purpose of this test is to find out how much you actually know about jobs. For this reason, we have given you an answer to each question that reads "I do not know". If you have a pretty good idea what the right answer is, then we suggest you mark it. If, on the other hand, you have no idea at all, or are very doubtful, then you should mark the last choice--"I do not know".

This test is also different in that it will not affect your grades in school. Try to do the best you can because then you will have a pretty good idea of how much you know about this subject. Your counselor will be sent the results of this test after they have been scored at Western Illinois University, and you may ask about the results then.

YOU WILL PUT YOUR ANSWERS ON THE ANSWER SHEET.

PLEASE MAKE NO MARKS ON THE TEST BOOKLET.

APPENDIX K - 2

TEST OF CAREER AND VOCATIONAL KNOWLEDGE
(Form A)

1. Before a person can practice law in the United States of America, a person must be trained in the law and also:
 - 1) hold a degree in political science
 - 2) pass a State Bar Examination
 - 3) an appointment to the bar by a judge
 - 4) be active in politics
 - 5) I do not know
2. Requirements for registered nurses are that each must:
 - 1) be licensed
 - 2) be a female
 - 3) work in hospitals
 - 4) have a college degree
 - 5) I do not know
3. A person who prepares financial statements, and installs filing and bookkeeping systems for many business firms is:
 - 1) an accountant
 - 2) a bookkeeper
 - 3) a lawyer
 - 4) a cashier
 - 5) I do not know
4. Which one of the following is not true regarding an architect?
 - 1) An architect generally keeps regular office hours.
 - 2) An architect plans, designs, and oversees the construction of all types of buildings.
 - 3) An architect gives professional advice on building design, materials, equipment, cost, and estimated building time.
 - 4) An architect spends a good deal of time acting as foreman for construction companies.
 - 5) I do not know.
5. A cataloger in a library should have a working knowledge of:
 - 1) the major sales catalog supply houses
 - 2) the Dewey Decimal System
 - 3) the major text book representatives
 - 4) how to purchase the best books for the library
 - 5) I do not know
6. A person who advises prospective buyers about stocks, bonds, corn and other grains is called a:
 - 1) merchant
 - 2) auctioneer
 - 3) sales representative
 - 4) broker
 - 5) I do not know
7. Which one of the following is not true regarding accounting and accountants:
 - 1) It is recommended that the training for a Certified Public Accountant (CPA) be 4 years of college with a major in accounting.
 - 2) In recent years, more than 9 out of 10 successful CPA candidates have been college graduates.
 - 3) The majority of the people in accounting work for the government.
 - 4) Universities, 2-year colleges, 4-year colleges, business schools, and correspondence schools offer accounting instruction.
 - 5) I do not know.

APPENDIX K - 3

-2-

8. In order for a dental assistant to get a certificate, he must have:
 - 1) a high school diploma, plus 106 hours of extension study course
 - 2) a Bachelor's degree
 - 3) a state license
 - 4) a diploma from a trade school
 - 5) I do not know
9. Which of the following is a duty of the electric meter reader?
 - 1) He installs meters.
 - 2) He watches for and reports any tampering with meters.
 - 3) He periodically tests meters to see that they are working properly.
 - 4) He reads the meters on big machines and shuts them off when proper reading is reached.
 - 5) I do not know.
10. The level of training most often required of policemen is:
 - 1) some college education
 - 2) special training in a police school
 - 3) a high school diploma only
 - 4) different from city to city, each setting its own requirements
 - 5) I do not know
11. A shelver in a small town library would:
 - 1) check books in and out
 - 2) put the books in their proper place
 - 3) order new books for the shelver
 - 4) run down over due books
 - 5) I do not know
12. The first on -the-job assignment for a beginner in public relations work often is:
 - 1) interviewing people who apply for jobs
 - 2) trying to collect overdue accounts from customers
 - 3) taking orders from customers over the telephone
 - 4) clipping and filing magazine and newspaper articles about the activities of a company and doing research to gather information needed later for writing speeches, pamphlets, etc.
 - 5) I do not know
13. Landscape architects usually get their training in:
 - 1) a four-year college
 - 2) a two-year technical school
 - 3) an apprenticeship program
 - 4) an art school
 - 5) I do not know
14. In the printing industry, there will be:
 - 1) fewer jobs for lithographers in the next ten years
 - 2) no change in the number of lithographers
 - 3) there will be more jobs for lithographers in the next ten years
 - 4) few jobs for lithographers due to automation
 - 5) I do not know

APPENDIX K - 4

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15. The level of training most often held by engineering and science technicians is:
 - 1) 2 years of college
 - 2) a Bachelor's degree
 - 3) a Master's degree
 - 4) a Doctor's degree
 - 5) I do not know
16. Training in jewelry repair is usually given in:
 - 1) trade and vocational schools
 - 2) high schools
 - 3) junior colleges
 - 4) shops that make and design jewelry
 - 5) I do not know
17. In order for a person to become a funeral director, he must first serve:
 - 1) two years in the military service
 - 2) one to three years as an apprentice
 - 3) five years as an undertaker
 - 4) one to three years as a priest or minister
 - 5) I do not know
18. To obtain the degree of Doctor of Veterinary Medicine, how many years of college are required?
 - 1) 2
 - 2) 4
 - 3) 6
 - 4) 8
 - 5) I do not know.
19. Which of the following is not true regarding music and musicians?
 - 1) Only about 10% of the professional musicians are women.
 - 2) The professional musician makes all or a large part of his living by playing, singing, composing, conducting or teaching music.
 - 3) Generally, there are 3 kinds of performers: instrumentalists, vocalists, or conductors.
 - 4) Most students who perform in high school groups such as band and chorus have a good chance of becoming professional musicians.
 - 5) I do not know.
20. The employment of farm hands will:
 - 1) increase in the future
 - 2) decrease in the future
 - 3) stay about the same in the future
 - 4) completely disappear in the future
 - 5) I do not know
21. Three years of college are necessary to enter an approved school of medical technology. Which of the following is not required during this three years?
 - 1) Mathematics.
 - 2) Foreign Language.
 - 3) Biological sciences.
 - 4) Chemistry.
 - 5) I do not know.

APPENDIX K - 5

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22. A cigarette girl needs:
- 1) to be a graduate of a licensed charm school
 - 2) two years of modeling experience
 - 3) no set amount of training
 - 4) a high school diploma
 - 5) I do not know
23. If you took a job in a TV broadcasting station as a floorman, you would be responsible for:
- 1) operating the special sound equipment
 - 2) planning and supervising the setting up of the scenery and props
 - 3) setting up stage scenery, props, and holding up the cue cards
 - 4) directing the actor's positions and movements on the stage
 - 5) I do not know
24. A school superintendent should have at least:
- 1) 3 years of college
 - 2) a high school diploma
 - 3) 5 years of college
 - 4) 1 year of college
 - 5) I do not know
25. Which of the following is not one of the requirements for becoming an FBI agent?
- 1) Must be between 23 and 40 years of age and at least 5'7" tall.
 - 2) Must be a graduate of a state accredited law school (resident) or a four-year resident accounting school with three years of experience in the field.
 - 3) Must pass a rigid physical as well as written and oral examination.
 - 4) Must have had at least five years experience as a state policeman.
 - 5) I do not know.
26. A personnel worker in a large factory would be most apt to do which of the following:
- 1) interview people applying for a job
 - 2) work on the assembly line
 - 3) type reports involving the profits and losses of the company
 - 4) make fund raising speeches for the heart fund
 - 5) I do not know
27. A floor decorator:
- 1) lays flooring and rugs
 - 2) places things on the floor in a pleasing arrangement
 - 3) sells rugs and carpeting and other flooring
 - 4) sells articles to place on the floor for decorative purposes
 - 5) I do not know
28. The person employed in a large library to truck or carry books and other library materials from the shelves to the issue or circulation desk is usually a:
- 1) circulation librarian
 - 2) documentary librarian
 - 3) library page
 - 4) librarian in charge of accession
 - 5) I do not know

APPENDIX K - 6

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29. A young woman with a natural talent for writing and a desire to become an advertising copywriter or advertising manager would find the best way to get started would be to:
- 1) take a correspondence course in writing advertising copy
 - 2) complete a 4-year liberal arts course
 - 3) work during the summer in the subscription department of a newspaper
 - 4) get a job as a clerk or runner in the advertising department of a retail store and become acquainted with the store buyers and advertising people
 - 5) I do not know
30. Some of the duties of a gasoline service station attendant are:
- 1) to help build and design new cars and trucks
 - 2) to take care of major auto repairs
 - 3) to check the fan belt, radiator, and battery
 - 4) to test out new gasolines
 - 5) I do not know
31. For a person to qualify to teach Art at the high school level he would need:
- 1) at least some art training beyond high school in a school of applied art
 - 2) at least a college degree and certification to teach
 - 3) a college degree in painting, sculpture, industrial arts, and music
 - 4) a Doctoral degree from an accredited university
 - 5) I do not know
32. Lithography (offset printing) is one of the most rapidly growing printing processes. In order to qualify for a career in this field, one:
- 1) must be an apprentice for 4 or 5 years
 - 2) must have work experience for 2 years
 - 3) must have attended college for 4 years and majored in lithography
 - 4) must have 1 year of training in a vocational school
 - 5) I do not know
33. One of the duties of an insurance adjuster is:
- 1) to plan the cost of insurance so the company can make money
 - 2) to decide the amount of money to be paid to customers from the profits
 - 3) to help in determining the money to be paid after a loss
 - 4) to arrange the records so that taxes will not be overpaid
 - 5) I do not know
34. Nurses aides usually work forty hours a week and receive a salary of:
- 1) more than registered nurses
 - 2) a little less than practical nurses
 - 3) equal to school teachers
 - 4) a little less than doctors
 - 5) I do not know
35. In order to prepare for a job as a file clerk for an insurance company, a person needs:
- 1) to go to college
 - 2) to go to business school
 - 3) to take a night course in general business
 - 4) no special training
 - 5) I do not know

APPENDIX K - 7

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36. Employment opportunities for dental technicians are wide and are expected to be plentiful in:
- 1) large commercial laboratories
 - 2) state colleges
 - 3) public high schools
 - 4) hospitals
 - 5) I do not know
37. Most states require that a new barber school graduate:
- 1) be at least 21 years old
 - 2) have a high school diploma
 - 3) have successfully completed a 3-year barber training school program
 - 4) take a state exam for a license to become an apprentice barber for 1 or 2 years
 - 5) I do not know
38. Any person with a knowledge of plants and animals gained in a high school biology course might obtain a job as:
- 1) a laboratory technician
 - 2) a practical nurse
 - 3) a biological aide
 - 4) a museum specialist
 - 5) I do not know
39. Before a person can enter training to become a psychiatrist he must first obtain a degree in:
- 1) clinical psychology
 - 2) psychology in education
 - 3) statistical analysis
 - 4) medicine
 - 5) I do not know
40. Opportunities for postal clerks to advance to more responsible positions are:
- 1) very good
 - 2) very limited
 - 3) as good as in other clerking jobs
 - 4) better than most other clerking jobs
 - 5) I do not know
41. A stenographer who seeks a position as a private secretary to a business executive will:
- 1) find secretarial training in a business school or junior college a valuable asset
 - 2) find it desirable to be able to take dictation at a rate of at least 160 words per minute
 - 3) find this type of job only through seniority
 - 4) be able to get this type of job only in a city of two million or more people
 - 5) I do not know
42. Our national parks are visited yearly by millions of Americans who come in contact with park rangers called ranger naturalists. The primary job of the ranger naturalist is:
- 1) the prevention of forest fires
 - 2) conservation
 - 3) to tell the tourists about the history and wonders of the park
 - 4) to act as caretakers of nature in the park
 - 5) I do not know

APPENDIX K - 8

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43. A milliner's helper assists in the making of:
- 1) customed draperies
 - 2) hand-knitted sweaters
 - 3) fashionable hats
 - 4) chocolate candies
 - 5) I do not know
44. In which of the following activities would a landscape architect most likely be involved?
- 1) Drawing blueprints for an office building, church, home, or other structure.
 - 2) Experimenting with a field of corn or other crop to determine the effect of the soil on the plant.
 - 3) Cultivating and watering the soil around shrubs, flowers, and trees.
 - 4) Giving advice on land planning problems dealing with parks, homes, playgrounds, country clubs, golf courses, etc.
 - 5) I do not know.
45. A good bakery routeman must be:
- 1) a good driver and salesman
 - 2) a licensed mechanic
 - 3) a member of the baker's union
 - 4) an experienced buyer of ingredients for bakery products
 - 5) I do not know
46. A policewoman is usually assigned to:
- 1) detective work
 - 2) direct traffic
 - 3) question and fingerprint women prisoners
 - 4) drive patrol cars
 - 5) I do not know
47. Most programs in x-ray technology require:
- 1) 1 year of training
 - 2) 2 years of training
 - 3) 3 years of training
 - 4) 6 months of training
 - 5) I do not know
48. A waitress in a small restaurant needs:
- 1) a high school diploma
 - 2) an eighth grade education
 - 3) no definite amount of schooling
 - 4) three years of high school home economics
 - 5) I do not know
49. Before becoming a mail carrier, one must:
- 1) demonstrate his ability to get along with dogs
 - 2) pass a civil service exam
 - 3) be able to walk 15 miles in one hour
 - 4) be at least 5' 6" tall and weigh at least 120 pounds
 - 5) I do not know

APPENDIX K - 9

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50. A person, with or without a high school education, who has the ability to talk with people would probably succeed as:
- 1) hotel or motel room service clerk
 - 2) social worker
 - 3) bank teller
 - 4) masseur
 - 5) I do not know
51. A licensed practical nurse usually receives training for:
- 1) one year
 - 2) two years
 - 3) six months
 - 4) three years
 - 5) I do not know
52. The historian who appraises and directs the safekeeping of important documents of history is called a/an:
- 1) archivist
 - 2) editor
 - 3) dispatcher
 - 4) archaeologist
 - 5) I do not know
53. The difference between a secretary and a stenographer is that:
- 1) a secretary does not take dictation while a stenographer does
 - 2) a secretary has a wider variety of duties
 - 3) there is no difference
 - 4) a secretary must be a woman and a stenographer may be either
 - 5) I do not know
54. Approximately what per cent of the cooks employed in the United States are men?
- 1) 10%
 - 2) 20%
 - 3) 30%
 - 4) 40%
 - 5) I do not know.
55. Which of the following activities would an untrained library assistant be least apt to do?
- 1) Type cards under the supervision of the librarian.
 - 2) Make up book orders based upon his own judgement.
 - 3) File cards under the supervision of the cataloger.
 - 4) Shelve books.
 - 5) I do not know.
56. Most employers of automobile mechanics would require them to either own or purchase which of the following:
- 1) a car
 - 2) set of record books
 - 3) special shoes
 - 4) a set of hand tools
 - 5) I do not know

APPENDIX K - 10

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57. Most airline stewardesses receive their airline training:
- 1) in schools provided by the airline
 - 2) while in high school
 - 3) from the pilots
 - 4) from correspondence courses
 - 5) I do not know
58. A peddler is a person who:
- 1) makes the final test on bicycles before they are sold
 - 2) delivers messages from one office to another
 - 3) goes from door to door selling goods
 - 4) operates various rides at a carnival
 - 5) I do not know
59. In order to become a retail manager of a chain store, a person usually must have:
- 1) seven years of experience
 - 2) four years of college
 - 3) experience and training set up by a company
 - 4) a Bachelor's degree and five years experience
 - 5) I do not know
60. What educational qualifications would a professional interior decorator or designer need to meet?
- 1) Finish eighth grade.
 - 2) Finish high school.
 - 3) College degree.
 - 4) Master's degree.
 - 5) I do not know.
61. In any industrial factory, those employees who are unskilled will begin at the lowest pay rate per hour as:
- 1) factory sweepers (janitor)
 - 2) factory maintenance men
 - 3) factory tool room attendants
 - 4) factory materials handler
 - 5) I do not know
62. The minimum educational requirement for a commercial artist is usually:
- 1) a Bachelor of Fine Arts degree
 - 2) advanced study in art beyond the Bachelor of Fine Arts degree
 - 3) at least a high school education and some specialized training beyond
 - 4) no more than an eighth grade education
 - 5) I do not know
63. A newspaper correspondent:
- 1) plans editorials of local interest
 - 2) writes about happenings where he is located
 - 3) exchanges news items with other newspapers
 - 4) selects events of interest from the past
 - 5) I do not know

APPENDIX K - 11

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64. An untrained worker in a hospital might perform which one of the following duties?
- 1) Wash and sterilize glassware.
 - 2) take blood samples.
 - 3) Analyze body fluids.
 - 4) Order antibiotics.
 - 5) I do not know.
65. Which one of the following backgrounds would be good training for a farm machinery salesman?
- 1) Teaching.
 - 2) Farm machinery mechanic.
 - 3) Truck driver.
 - 4) Delivery boy.
 - 5) I do not know
66. A good way for a high school student to find out if he has the interest and personal qualities necessary for a career as a social worker would be by part-time or summer work experiences as:
- 1) a carhop at the local root beer stand
 - 2) a check-out clerk at the supermarket
 - 3) a helper at summer camp, settlement house, or community center
 - 4) an attendant at the filling station
 - 5) I do not know
67. A real estate salesman deals with:
- 1) the buying of stocks and bonds
 - 2) the selling of wholesale goods
 - 3) the selling of retail goods
 - 4) the selling of land, homes, farms, and businesses
 - 5) I do not know
68. The stenotypist:
- 1) takes dictation or records the sayings of another person on a stenotype machine
 - 2) types up letters from shorthand notes
 - 3) only takes dictation in shorthand
 - 4) types letters and papers from a stenographer's notes
 - 5) I do not know
69. A sales clerk in a retail store usually:
- 1) needs a high school diploma
 - 2) does not need a high school diploma
 - 3) needs a course in salesmanship
 - 4) needs schooling beyond high school
 - 5) I do not know
70. The medical record librarian would most likely find employment in a:
- 1) Clinic.
 - 2) Public library.
 - 3) Doctor's office.
 - 4) School library.
 - 5) I do not know.

APPENDIX L - 1

TEST OF CAREER AND VOCATIONAL KNOWLEDGE
(Form B)

1. Agricultural engineers:
 - 1) work only with machinery
 - 2) need no training beyond high school
 - 3) may work with soil and water control as well as with machinery and electricity
 - 4) are no longer needed in our economy
 - 5) I do not know

2. The most important ability which a file clerk must possess is the ability to:
 - 1) type
 - 2) read
 - 3) take shorthand
 - 4) meet people
 - 5) I do not know

3. A general contractor must have:
 - 1) a high school diploma
 - 2) an eighth grade education
 - 3) education does not matter
 - 4) college degree in engineering
 - 5) I do not know

4. A computer programmer must be highly skilled in:
 - 1) operating a computer
 - 2) accounting procedures
 - 3) mathematical procedures
 - 4) computer technology
 - 5) I do not know

5. Which of the following would require the least amount of education and training?
 - 1) Lawyer.
 - 2) Translator.
 - 3) Judge.
 - 4) Library Page.
 - 5) I do not know.

6. A sales clerk working in a clothing store should:
 - 1) know how to match color combinations
 - 2) know the net profit of the store
 - 3) know where all the clothes are purchased
 - 4) know the salaries made by all the employees
 - 5) I do not know

7. To be a statistician, a person must have:
 - 1) four years of mathematics in high school
 - 2) at least two years of high school mathematics and college algebra
 - 3) a college major in mathematics and develop a high ability in probability and statistics
 - 4) high ability in basic addition, subtraction, multiplication, and division
 - 5) I do not know

APPENDIX L - 2

-2-

8. A telephone engineer might do one of the following:
 - 1) assign switchboard positions to operators
 - 2) plan the building of a telephone system
 - 3) supply information to callers and record messages
 - 4) operate cord or cordless switchboards
 - 5) I do not know

9. Which of the following is not true regarding music and musicians?
 - 1) In order to become a high school music teacher, one must have a college (Bachelor's) degree and a teaching certificate.
 - 2) In order to become a professional musician, one must have a college (Bachelor's) degree.
 - 3) In order to teach in most colleges, one must have a Master's degree or Doctoral degree.
 - 4) Practically all music majors specialize in one specific area, such as instrumental music, choral music, piano, strings, etc.
 - 5) I do not know.

10. Farmers:
 - 1) have been decreasing in numbers in the last fifty years
 - 2) need less and less education
 - 3) will be more and more in demand with the increase in population
 - 4) are becoming less and less specialized in their activities
 - 5) I do not know

11. To qualify as a professional librarian, such as those employed in colleges and universities, a person must have:
 - 1) a course in library science or on the job training
 - 2) at least two years of liberal arts training or an Associate in Arts degree
 - 3) four years of college to receive a Bachelor's degree and a fifth year or more of specialized study in library science
 - 4) study at least equal to that required for a Doctoral degree
 - 5) I do not know

12. What is the minimum age requirement for stewardesses with nearly all major airlines?
 - 1) 16
 - 2) 18
 - 3) 21
 - 4) 24
 - 5) I do not know.

13. A person working as a stage clearer would perform such tasks as:
 - 1) removing unnecessary people from the stage before a production begins
 - 2) placing microphones and other equipment on sets and stages
 - 3) removing stage furniture at the end of each scene and preparing stage for the next scene
 - 4) acting as substitute play director
 - 5) I do not know

14. In order to get a job as a postal clerk, a person would:
 - 1) need a high school diploma and training in a U.S. Postal Service school
 - 2) need a college degree
 - 3) have to know some congressman since these are political appointments
 - 4) need to take a civil service test
 - 5) I do not know

APPENDIX L - 3

-3-

15. Approximately 3/4 of all the sociologists in the United States are employed by:
 - 1) welfare agencies
 - 2) federal and state agencies
 - 3) high schools
 - 4) colleges and universities
 - 5) I do not know

16. If a young man decided to become a cook, he would find:
 - 1) that women are preferred
 - 2) that he has very little chance to advance
 - 3) he could be sure of becoming a famous chef
 - 4) good chances for advancement
 - 5) I do not know

17. The usual and best way to prepare for a career in law is:
 - 1) four years of college and then four years of law school
 - 2) four years of college and then two years of law school
 - 3) two years of college and then two years of law school
 - 4) three to four years of college and then three years of law school
 - 5) I do not know

18. Machine operators in most large factories are required to have:
 - 1) eighth grade education
 - 2) high school education
 - 3) junior college education
 - 4) four-year college degree
 - 5) I do not know

19. The most widely accepted training for commercial artists is given in:
 - 1) special art schools
 - 2) four-year colleges
 - 3) Army, Navy, or Air Force schools
 - 4) college home study subjects
 - 5) I do not know

20. A hod carrier is a laborer that works directly with:
 - 1) a plumber
 - 2) a mechanic
 - 3) a bricklayer
 - 4) a carpenter
 - 5) I do not know

21. A circulation librarian assistant has as his chief duty the job of:
 - 1) cataloging books
 - 2) purchasing new books
 - 3) stacking shelves
 - 4) helping guests find books
 - 5) I do not know

APPENDIX L - 4

-4-

22. Which of the following would be the least important ability to be successful as a beautician?
- 1) Keeping up with changing hair styles.
 - 2) Establishing and maintaining friendly relationships with people.
 - 3) Having good clerical and math ability.
 - 4) Being skillful with one's hands.
 - 5) I do not know.
23. If you were to take up the practice of dentistry, you would need:
- 1) six years in a dental school
 - 2) a Doctor of Dental Surgery degree plus a license to practice dentistry
 - 3) two years in a dental school
 - 4) eight years in a dental school
 - 5) I do not know
24. One possible disadvantage of being an interpreter is that:
- 1) he is not highly paid
 - 2) he must learn many languages
 - 3) he seems to have no home
 - 4) women are not given any opportunities
 - 5) I do not know
25. While in high school a student interested in becoming a newspaper reporter should take:
- 1) journalism and English
 - 2) mathematics and science
 - 3) vocational subjects
 - 4) creative art
 - 5) I do not know
26. A carpenter's helper:
- 1) must own a power saw
 - 2) must own several hand saws
 - 3) must own a complete set of carpenter's tools
 - 4) does not need to own any tools
 - 5) I do not know
27. A library shelver is mainly concerned with:
- 1) purchasing shelves for a library
 - 2) returning books to shelves
 - 3) cleaning shelves and books
 - 4) arranging the library so that books can be found easily
 - 5) I do not know
28. Which one of the following is true regarding nursing and registered nurses?
- 1) The duties of registered professional nurses are determined by their education, their field of specialization, their employers, and the location of their employment.
 - 2) Only girls are allowed to become nurses. No boys are allowed in this field.
 - 3) Registered professional nurses are allowed to work only in hospitals.
 - 4) A state license can help a professional nurse get a job but is not a requirement.
 - 5) I do not know.

APPENDIX L - 5

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29. A bus driver driving passengers from one part of a city to another is usually required to:
- 1) have at least two years of college
 - 2) complete a short training program
 - 3) complete an apprentice program
 - 4) complete a mechanics course at a vocational school
 - 5) I do not know
30. Which one of the following is not true regarding archaeology and archaeologists?
- 1) One who wants to study archaeology in college should have some knowledge of history, languages including English, and speech.
 - 2) In college, an archaeology student would study anthropology, psychology, economics, political science, architecture, art, geology, biology, and meteorology.
 - 3) Most jobs in archaeology are in "field" archaeology in which the archaeologist organizes and directs the excavation of archaeological sites.
 - 4) Most archaeological jobs require one to have a doctoral degree.
 - 5) I do not know.
31. A copywriter:
- 1) writes original and descriptive advertising copy
 - 2) writes a column which appears regularly in newspapers or magazines
 - 3) writes stories about events having news value
 - 4) writes original plays for the stage and theatre
 - 5) I do not know
32. An x-ray technician would probably get his training:
- 1) in a medical school or university
 - 2) in a technical school
 - 3) on the job
 - 4) in a vocational high school
 - 5) I do not know
33. In order to become a certified public accountant (CPA), one must:
- 1) obtain a degree in accounting
 - 2) obtain an associate degree in public accounting
 - 3) obtain an accounting degree with a minor in business
 - 4) obtain an accounting degree and pass a state accountancy exam
 - 5) I do not know
34. A cake decorator who works in her own home depends upon most of her work from:
- 1) local bakeries
 - 2) hotels and restaurants
 - 3) individuals in the community for special events such as weddings, parties, teas, etc.
 - 4) school hot lunch programs
 - 5) I do not know
35. Before a girl enters training for practical nursing, she must have:
- 1) a high school diploma
 - 2) completed eighth grade
 - 3) some college
 - 4) college degree
 - 5) I do not know

APPENDIX L - 6

-6-

36. A state policeman's salary may be most like that of a:
- 1) filling station attendant
 - 2) lawyer
 - 3) school teacher
 - 4) army private
 - 5) I do not know
37. A typist would probably work:
- 1) in an office doing many different jobs besides typing
 - 2) in an office with several other typists, doing mostly routine typing
 - 3) as a receptionist and general secretary
 - 4) taking dictation, keeping books and typing
 - 5) I do not know
38. Which of the following is not true regarding accounting and accountants?
- 1) There are various kinds of accountants including: General, Certified Public, Cost, Tax, Budget, Independent Auditor (public accounting), Internal, Teacher of Accounting.
 - 2) The accountant usually does nothing more than keep records.
 - 3) In the field of accounting, a distinction is made between qualified and unqualified accountants.
 - 4) The work performed by an accountant will depend on his ability, his specialty, and the size of the organization for which he works.
 - 5) I do not know.
39. The job of an engineering technician is to:
- 1) help new engineers understand their jobs
 - 2) design bridges and roads
 - 3) assist the professional engineer
 - 4) operate the heavy equipment on a construction job
 - 5) I do not know
40. The best way to get a job as an auctioneer is:
- 1) to advertise in the newspapers at a lower salary than is being paid
 - 2) to contact people and ask for sales when and if such services are needed
 - 3) to become an assistant with a well known auctioneer
 - 4) to join the National Auctioneers Association
 - 5) I do not know
41. A person desiring to become a registered medical technologist must:
- 1) complete a two-year junior college course in medical technology
 - 2) complete three years of college work in appropriate science and math courses followed by a year in an approved school of medical technology
 - 3) serve a three-year apprenticeship in an approved hospital laboratory
 - 4) receive a college degree in chemistry and pass a state exam for licensing
 - 5) I do not know
42. A florist helper would:
- 1) lay floor tile
 - 2) lay carpet on floors
 - 3) create new kinds of flowers
 - 4) help with work around the greenhouse
 - 5) I do not know

APPENDIX L - 7

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43. A singer who plans to teach music in public high schools should major in music education and have at least:
- 1) two years of college
 - 2) a Bachelor's degree
 - 3) a Master's degree
 - 4) a Doctor's degree
 - 5) I do not know
44. A person entering the field of automatic data processing, whether in programming, maintenance, or selling, would find employers seeking employees:
- 1) who are high school graduates with industrial arts training in mechanical drawing
 - 2) who are high school graduates with business courses, especially typing and shorthand
 - 3) who are high school graduates with additional business college training in business administration
 - 4) with college degrees in engineering and technical areas
 - 5) I do not know
45. A cigarette girl:
- 1) fills cigarette machines
 - 2) sells cigarettes in a night club
 - 3) inspects cigarettes in a factory
 - 4) poses for cigarette ads
 - 5) I do not know
46. To be a success in the decorating field, a person must combine the talents of designer and artist with the abilities of:
- 1) a businessman
 - 2) a painter
 - 3) a carpenter
 - 4) a paperhanger
 - 5) I do not know
47. Which one of the following words best describes the annual earnings of most actors and actresses when compared to people in the other professions such as law and medicine?
- 1) Low.
 - 2) Medium.
 - 3) High.
 - 4) Very high.
 - 5) I do not know.
48. To become a Doctor of Veterinary Medicine requires:
- 1) two years of study at the college or university level
 - 2) four years of study at the college or university level
 - 3) a Bachelor of Science degree and one year of study in veterinary medicine
 - 4) at least six years of study concentrated primarily in the sciences, both pre-veterinary and veterinary training
 - 5) I do not know
49. A person employed as a stock clerk would work:
- 1) in a gun factory
 - 2) at a sale barn where animals are sold
 - 3) in a warehouse or parts room
 - 4) in an office where shares of large companies are sold
 - 5) I do not know

APPENDIX L - 8

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50. Most states require a waiter or waitress:
- 1) to be over 18 years old
 - 2) to be at least 21 years old
 - 3) to have a health certificate to indicate freedom from communicable diseases
 - 4) training in public relations techniques
 - 5) I do not know
51. A person who becomes a Certified Life Underwriter (CLU) (life insurance) salesman usually gets the training for a CLU:
- 1) in graduate schools of colleges and universities
 - 2) from the Institute of Life Insurance
 - 3) on the job through correspondence study
 - 4) in workshops held by the State Board of Insurance Examiners
 - 5) I do not know
52. The number of hotel managers:
- 1) will increase in the future
 - 2) will decrease in the future
 - 3) will continue about the same level in the future
 - 4) will gradually disappear because of drive-in hotels
 - 5) I do not know
53. In addition to a pleasant personality, ability to put people at ease, and good business sense, a person who wants to become a commercial or portrait photographer should have:
- 1) musical talent
 - 2) manual dexterity and artistic ability
 - 3) great strength and stamina
 - 4) a natural teaching ability
 - 5) I do not know
54. A laboratory cleaner is not required to:
- 1) clean cages
 - 2) sweep floors
 - 3) have formal training
 - 4) wash equipment
 - 5) I do not know
55. A peddler sells his wares:
- 1) from a store
 - 2) through a catalog
 - 3) door-to-door
 - 4) by advertising and then calling on the interested people
 - 5) I do not know
56. Which one of the following would most likely have the greatest amount of education?
- 1) Sales clerk.
 - 2) Door-to-door salesman.
 - 3) Sales manager.
 - 4) Car salesman.
 - 5) I do not know.

APPENDIX L - 9

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57. Public relations workers are found in many businesses. One of their duties is:
- 1) to select workers for apprenticeship
 - 2) to select material to be used in the manufacturing of the company product
 - 3) to provide information about the company to build a favorable public opinion
 - 4) to supervise training programs
 - 5) I do not know
58. A nurses aide may be permitted to:
- 1) perform surgery
 - 2) take temperatures
 - 3) give shots
 - 4) write prescriptions
 - 5) I do not know
59. To become a union cement finisher you should:
- 1) have a college degree
 - 2) have a high school diploma
 - 3) go to a trade school
 - 4) complete a 3-year apprenticeship
 - 5) I do not know
60. Most real estate salesmen begin their career by:
- 1) traveling in the community trying to learn the value of property
 - 2) working in a real estate office
 - 3) making a list of property which might be for sale
 - 4) joining the Real Estate Union
 - 5) I do not know
61. Which one of the following duties would a dental technician most likely perform?
- 1) Pull teeth.
 - 2) Record appointments.
 - 3) Chair-side assisting.
 - 4) Make artificial dentures.
 - 5) I do not know.
62. The minimum requirement to become a physical education teacher is:
- 1) a Bachelor's degree
 - 2) a Master's degree
 - 3) one year of college and two years experience
 - 4) a high school diploma
 - 5) I do not know
63. A legal secretary works for:
- 1) an accountant
 - 2) a doctor
 - 3) a lawyer
 - 4) an executive
 - 5) I do not know

APPENDIX L - 10

-10-

64. A telephone operator:
- 1) must have a year of training in a vocational school
 - 2) receives most of her training on the job
 - 3) must have studied physics and electricity in high school
 - 4) should have some college education
 - 5) I do not know
65. A teacher's aide:
- 1) might be a mature woman without special training
 - 2) must have a college degree
 - 3) needs special training
 - 4) must have taken certain courses in high school
 - 5) I do not know
66. The minimum requirement to obtain a job as a sales clerk in a department or general merchandise store is:
- 1) a high school diploma
 - 2) a college degree
 - 3) a license to sell products
 - 4) a pleasing personality, interest in sales work, neat appearance, honesty, and willingness to work
 - 5) I do not know
67. In order to become a nurses aide in a hospital, a person must have:
- 1) earned a college degree
 - 2) finished a program in practical nursing
 - 3) passed the state exam for registered nurses
 - 4) no special training or test is required
 - 5) I do not know
68. Positions of hotel managers are usually filled by:
- 1) men who have specialized in a 4-year college course in hotel administration
 - 2) experienced men who have come up from the ranks in the hotel business
 - 3) men who have completed the home study course given by the American Hotel Institute
 - 4) men who have taken courses in hotel management given by a junior college
 - 5) I do not know
69. Most people who become professional musicians start their study of an instrument:
- 1) at an early age
 - 2) while in high school
 - 3) after high school
 - 4) at no particular age
 - 5) I do not know
70. Biological aides would most likely perform work such as:
- 1) performing experiments
 - 2) caring for laboratory equipment
 - 3) sweeping floors
 - 4) taking dictation for the biologist
 - 5) I do not know

APPENDIX M - 1

CAREER QUESTIONNAIRE

Instructions: This is not a test. These are some questions about you and your ideas about your future. Most of the time you will be able to find an answer that fits you; if you are not sure, select the answer that seems best for you.

All of your answers will be kept confidential, only research people or your counselor will see your answers. Your answers will be combined with the answers of thousands of other students for comparison purposes.

Your answers are to be put on the separate answer sheet. Be sure you use only a number two, or soft pencil. Follow the instructions on the answer sheet for marking your answers.

Section I

A. In the space provided on the answer sheet, print the name of the occupation, career, job or profession which you would most like to enter if there were nothing standing in your way. Assume that you had no problems of ability, or money for education. Try to choose something which you would like at the present time. If you absolutely cannot think of any, write NONE. Girls who want to get married without going to work should put HOUSEWIFE.

1. The kind of occupation I prefer requires:
 - 1) very little or no special training
 - 2) some experience or on the job training
 - 3) apprenticeship training
 - 4) technical or trade school education
 - 5) a college degree (about four years)
 - 6) some professional or graduate education beyond the four years of college
 - 7) I do not know

2. Which reason do you think is most important to you in choosing a career or occupation? (choose only one)
 - 1) Liking the work.
 - 2) How much the job pays.
 - 3) Being sure that I will succeed in the occupation.
 - 4) Being sure that I will be able to do the work.
 - 5) Choosing something which people respect and admire.
 - 6) Choosing something which will please certain people in my life now, such as my parents, a teacher, or friends.

3. How certain are you that this choice is what you really prefer?
(If you answered NONE to "A" above, leave this item blank.)
 - 1) Very doubtful.
 - 2) Somewhat doubtful.
 - 3) Fairly certain.
 - 4) Somewhat certain.
 - 5) Very certain.

4. If I had my choice, I would like to live:
 - 1) right in this immediate community
 - 2) in a small community, but not here
 - 3) in a large city
 - 4) any place I have to go to find the kind of work I prefer

APPENDIX M - 2

-2-

B. In the space provided, write the name of the occupation, career, job or profession which you think you will probably enter. If this is the same as the answer to "A" above, you may write SAME. Try to name an occupation even if you are not sure. If you absolutely cannot name one, write NONE. Girls who think they will get married without going to work should put HOUSEWIFE.

5. The kind of occupation I think I will most likely enter, requires:
- 1) very little or no special training
 - 2) some experience or on the job training
 - 3) apprenticeship training
 - 4) technical or trade school education
 - 5) a college degree (about four years)
 - 6) some professional or graduate education beyond the four years of college
 - 7) I do not know
6. If your answer to "A" is different from your answer to "B", which reason is closest to the reason they are different? (If the two choices are not different, leave this item blank.)
- 1) I do not think I have the ability for my preference ("A").
 - 2) There are not enough opportunities (not enough demand) for the kind of work I prefer ("A").
 - 3) Others think my preference ("A") is silly or impractical.
 - 4) My preference ("A") does not pay enough money.
 - 5) It takes too long to be trained or educated for my preference ("A").
 - 6) It costs too much to be educated for my preference ("A").
 - 7) Marriage may prevent me from entering the vocation of my choice ("A").
 - 8) Other personal reasons not listed above.
7. How certain are you that you will enter the vocation you named in "B" above? (If your answer was NONE, leave this item blank.)
- 1) Very doubtful.
 - 2) Somewhat doubtful.
 - 3) Neither certain nor doubtful.
 - 4) Somewhat certain.
 - 5) Very certain.
8. I think I will probably live:
- 1) right in this community
 - 2) in a small community, or on a farm, but not here
 - 3) in a large city
 - 4) wherever I need to go to find the job I get
 - 5) (girls) wherever my future husband needs to go

APPENDIX M - 3

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Section III

General Questions. Pick only one answer to each question.

9. How do you feel now about how much you know about jobs and careers?
- 1) I have very little information which will help me plan my future.
 - 2) I have a little information.
 - 3) I have some information.
 - 4) I have almost enough information.
 - 5) I have enough information.
10. What do others (parents, relatives, and friends) think of your plans for the future?
- 1) People seem to be strongly in favor of the ideas I have.
 - 2) People seem to be in favor of the ideas I have.
 - 3) People seem to be pretty neutral about the ideas I have.
 - 4) People seem to disapprove of the ideas I have.
 - 5) People seem to strongly disapprove of the ideas I have.
 - 6) People just do not seem to care what I think.
11. How do you feel about your vocational future?
- 1) I worry a great deal about it.
 - 2) I worry some about it.
 - 3) I think some about it.
 - 4) I feel it will come out all right.
 - 5) I do not care much.
12. Which best describes the occupation of the main wage earner in your family?
- 1) Farm owner and operator.
 - 2) Farm renter.
 - 3) Farmhand.
 - 4) Owner of a business, a manager, or supervisor.
 - 5) Skilled trade (carpenter, hairdresser, machinist, etc.).
 - 6) Unskilled, or semi-skilled worker (laborer, sweeper, truck driver, etc.).
 - 7) Professional (teacher, doctor, lawyer, etc.).
 - 8) Other.
 - 9) I do not know.
13. My mother:
- 1) has less than a high school education
 - 2) has some high school education
 - 3) has a high school diploma
 - 4) has some college or trade school
 - 5) has a college degree
 - 6) I do not know
14. My father:
- 1) has less than a high school education
 - 2) has some high school education
 - 3) has a high school diploma
 - 4) has some college or trade school
 - 5) has a college degree
 - 6) I do not know

APPENDIX M - 4

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15. Which is correct?

- 1) I am an only child.
- 2) I am the younger of two children.
- 3) I am the youngest of a larger family.
- 4) I am the middle child of three.
- 5) I am one of the middle children of a larger family.
- 6) I am the older of two children.
- 7) I am the oldest of a larger family.
- 8) I do not know.

16. Which is most correct?

- 1) I live with my parents.
- 2) I live with my mother.
- 3) I live with my father.
- 4) I do not live with either parent.

17. Which is most correct?

- 1) I live on a farm and my parents or guardians are farmers.
- 2) I live in the country but we are not farmers.
- 3) I live in a small town (less than 5,000 people).
- 4) I live in a larger town (5,000 to 20,000 people).
- 5) I live in a city (more than 20,000 people).

18. My grade in school is:

- 1) 9th
- 2) 10th
- 3) 11th
- 4) 12th

19. My age at my last birthday was:

- 1) 13 years or younger
- 2) 14 years
- 3) 15 years
- 4) 16 years
- 5) 17 years
- 6) 18 years
- 7) 19 years or older

20. I am a:

- 1) boy
- 2) girl

APPENDIX N - 1

VOCATIONAL-EDUCATIONAL INFORMATION WORKSHOP FOR RURAL GUIDANCE WORKERS

FINAL EVALUATION (Participants) May, 1967

I. Below is listed the several items on the program of the workshop. Please rank them in order of value to you.

- **Keynote Address: Correcting Deficiencies in Occupational Educational Information--Dr. K. B. Hoyt, Professor of Education, State University of Iowa.**
- **Vocational Guidance Services at the State Level. Mr. James Smith, Chief, Vocational Guidance Service, Vocational and Technical Division, Board of Vocational Education and Rehabilitation, State of Illinois.**
- **Illinois State Employment Service: Its Services to Youth. Ada Mostcovy, Supervisor, Services to Youth, Illinois State Employment Service.**
- **How Commercial Placement Agencies Can be of Service to Youth. Mr. William C. Murphy, Chairman, Ethical Standards and Practices Committee, Illinois Employment Association.**
- **Evaluation of Technical Training for High School Graduates. Miss Kathryn Ford, Executive Assistant to Director, Illinois Department of Registration and Education.**
- **Educational Opportunities in Technology for High School Graduates. Dr. M. Keith Humble, Director, Vocational Technical Institute, Southern Illinois University.**
- **Apprenticeship Opportunities for High School Graduates in Machinists Trades. Mr. Lee Chapman, Grand Lodge Representative, International Association of Machinists and Aerospace Workers.**
- **Apprenticeships for High School Graduates. Mr. Ray Davis, Field Representative, U.S. Department of Labor, Bureau of Apprenticeship and Training, Springfield, Illinois.**
- **Advising Students on College Selection and Admissions. Dr. James Williams, College Counselor, Glenbard West High School, Glen Ellyn, Illinois.**
- **Financial Aids for College Students. Mr. Herman Koester, Financial Aids Officer, Western Illinois University.**
- **Semi-Technical Education in Agriculturally Related Occupations. Mr. Edward Fitzgibbon, Sr., Head, Department of Agri-Business, Canton, Illinois.**
- **Opportunities for High School and College Graduates in Agriculturally Related Occupations. Dr. Arlon E. Elser, Acting Head, Department of Agriculture, Western Illinois University.**
- **Field Trip: Gale Products, Galesburg, Illinois.**
- **Opportunities in Data Processing. Mr. L. G. Huguen, Representative of International Business Machines.**
- **Evaluation of Secretarial and Business Training Opportunities for High School Graduates. Mr. Robert Egan, State Supervisor of Private Business Schools, State of Illinois.**
- **Career Opportunities for College Graduates with Liberal Arts and Non-Technical Majors. Mr. W. R. Clement, Regional Assistant, Montgomery Ward and Company.**
- **Career Opportunities for College Graduates with Scientific and Technical Majors. Mr. Robert Crowe, Personnel Supervisor, Iowa Ordnance Plant, Burlington, Iowa.**
- **Conducting Local Surveys of Employment Opportunities. Mr. David Gross, Corplan Associates, Chicago, Illinois.**

APPENDIX N - 2

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- II. In general, how do you feel about this type of workshop?
- 1. It was extremely valuable and plans should be made to continue it.
 - 2. It was valuable, but some modifications should be made in its structure.
 - 3. It was an interesting experiment, possibly worth modifying for the future.
 - 4. It was not particularly valuable, and probably not too promising as an idea.
 - 5. It was definitely not a good idea, I do not suggest pursuing it any further.

III. The goals of this workshop were to: 1.) Make you more informed, and 2.) Stimulate new information services in your school. How well do you feel these goals were accomplished?

IV. What specific suggestions do you have for improvement of this type of workshop? (Provided you think it is a good idea.)

V. What were the specific strengths of this approach to in-service counselor education?

APPENDIX P

CONVERSION OF RAW SCORE ON THE CAREER AND
VOCATIONAL KNOWLEDGE TEST TO STANINE SCORES¹

Raw Score		Stanine
Form A (N=1882)	Form B (N=2449)	
0 - 14	0 - 14	1
15 - 19	15 - 19	2
20 - 24	20 - 24	3
25 - 28	25 - 29	4
29 - 32	30 - 34	5
33 - 37	35 - 38	6
38 - 42	39 - 42	7
43 - 46	43 - 46	8
47 - 70	47 - 70	9

¹Based on fall (1966) administration to students in grades 9 - 12 inclusive, in rural Illinois high schools.