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I am submitting herewith a thesis written by Paul F. Walker entitled "A Follow-Up Plan and Its Effectiveness in Evaluation of the Athens Area Vocational-Technical School." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Industrial Education.

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A FOLLOW-UP PLAN AND ITS EFFECTIVENESS IN EVALUATION OF THE ATHENS AREA VOCATIONAL-TECHNICAL SCHOOL

A Thesis

Presented for the

Master of Science

Degree

The University of Tennessee

Paul F. Walker

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ABSTRACT

The purpose of this study was to develop a follow-up procedure which could be utilized by the administrative staff, student services department, and instructors of the Athens Area Vocational-Technical School for evaluating the total school's program.

The objectives were to develop a plan that would provide statistical information concerning the job history of graduates for use by the administrative staff in planning and evaluating the school's program; a plan that would provide information for judgmental opinions concerning the school's training program; a plan that will provide follow-up information as to the effectiveness of programs on an annual basis, in accordance with the Tennessee State Plan for Vocational Education; a plan that would meet the standards of the school's accrediting agency, Commission on Occupational Education, Southern Association of Colleges and Schools, by providing employment information on all graduates for a minimum of five years; a plan that would involve both instructors and student services department and a plan that could be maintained without excessive effort or exorbitant cost.

A mailed questionnaire with a cover letter and self-addressed, stamped envelope was determined to be the most practical method of obtaining information from former students. Five hundred twenty former students, who had completed a job classification as defined in the Dictionary of Occupational Titles for the school years 1969-70, 1971-72 and 1973-74, were requested to respond to the mailed questionnaire.

The findings of this study included: (1) 67 percent responded to the questionnaire; (2) 75 percent were initially employed in the field for which they trained; (3) 65 percent are still employed in the field for which they trained or a related field; (4) a majority of the former students rated the school programs as good or better.

In conclusion, sufficient former students will respond to a mailed questionnaire. The information obtained will provide sufficient data to make program evaluations and determine the quality of instruction.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Statement of Problem	2
	Importance of the Study	2
	Objectives	3
	Delimitations	4
	Hypotheses	5
	Definitions	5
	Organization of the Study	6
	Summary	6
II.	REVIEW OF LITERATURE	8
	Summary	19
III.	METHODS AND MATERIALS	21
	Summary	26
IV.	ANALYSIS OF DATA	28
	Summary	46
V.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	48
	Summary	48
	Conclusions	49
	Recommendations	51
BIBLIOGRAPHY		54
APPENDICES		57
Appendix A		58

CHAPTER PAGE

Appendix B 61

Appendix C 62

Appendix D 63

Appendix E 66

Appendix F 67

VITA 71

LIST OF TABLES

TABLE		PAGE
I.	Total Returned Questionnaires First and Second Mailing . .	30
II.	Employment Status of Former Students 1969-70, 1971-72, 1973-74	31
III.	Number Employed in Present Job Before Enrolling in a Training Program	32
IV.	Did Training Prepare Former Student for Present Job	33
V.	Reason(s) for Attending Vocational School	34
VI.	Classification of First Job	36
VII.	Average Number of Jobs Since Leaving School	37
VIII.	Reason(s) for Changing Job	38
IX.	Method of Obtaining First Job	40
X.	Method of Obtaining Present Job	41
XI.	Student Rating of School Programs	42
XII.	Average Hourly Pay Scale	43
XIII.	Attendance at Other Schools Since High School	44

CHAPTER I

INTRODUCTION

Vocational education has come to be accepted as that phase of education designed to improve the proficiency of an individual for and/or in a specific occupation. It is either preparatory for specific employment or supplementary to the work of those employed in a specific occupation. It is not restricted to boys and girls in secondary schools but is provided for any youth or adult who needs and can profit from vocational instruction (Ingram, 1956, p. 1).

A statewide system of Area Vocational-Technical Schools in Tennessee was established by the House of Representatives bill #633 and enacted by the 1963 General Assembly. The specific purpose of these area schools was to provide training centers to serve both the youths and adults from broad geographic areas by providing technical instruction and skill training in trade, technical and other occupations. The instructional program is designed to prepare persons for employment and to upgrade the skills and knowledge of persons who have already entered the labor force.

The Athens Area Vocational-Technical School began operation in July, 1965, with an initial enrollment of twenty-five students in three training areas. Due to increased enrollment and a need for more diversification, the full-time preparatory training areas have expanded to ten technical, skill, and semiprofessional areas. The school offers programs in Air Conditioning, Auto Body Repair, Automotive Mechanics,

Drafting, Electronics, Machine Shop, Masonry, Office Occupation, Practical Nurse, and Welding.

As a result of developments in science and technology, vocational education has assumed new prominence in occupational training. Some specific jobs are becoming obsolescent while other jobs are emerging. Therefore, vocational training centers need to reevaluate its system of accountability and valuation to keep pace with changes.

I. STATEMENT OF PROBLEM

This study represents an attempt to develop a follow-up procedure that can be utilized by the administrative staff, student services department, and instructors for evaluating the total school's program.

Results from such a study would be of value to assist the institution in determining if it is meeting the expressed objectives of preparing trainees to successfully secure and retain gainful employment in the field trained for and/or a related field of training.

II. IMPORTANCE OF THE STUDY

One measure of the effectiveness of an Area Vocational-Technical School's program is the ability of the trainees to successfully secure and retain employment in the field for which they have been trained. One method of measuring the effectiveness of instruction and to define the strengths and weaknesses of the school's program would be a follow-up of graduates of all training programs offered by the school (Boone, 1970, p. 20).

The Athens Area Vocational-Technical School personnel are not satisfied with their present follow-up procedures. The methods of follow-up have been primarily: (1) a birthday greeting questionnaire instituted by the State Student Services staff for Vocational Schools. This method is a birthday greeting mailed on the first birth date after leaving school, (2) reliance upon personal contact, by chance, of former students by instructor or administrative personnel. These methods have not been highly effective in supplying accurate and updated data in ascertaining the degree of success or failure of the school's overall training programs. This can be attributed to a low rate of response from birthday greeting follow-up, the lack of direct school supervision of the birthday greeting plan, and of scattered personal contacts of graduates.

In view of the rapid expansion of vocational education programs in the past few years and the broader acceptance of vocational education as a necessary part of the general education plan, an effective method of measuring the school's training program must be developed and implemented.

III. OBJECTIVES

The objectives of this follow-up study were to develop:

1. A plan that will provide statistical information concerning the job history of graduates for use by the administrative staff in planning and evaluation.

2. A plan that would provide information for judgmental opinions concerning the school's training program for use in program evaluation by administrative and instructional personnel.

3. A plan that will provide follow-up information as to the effectiveness of programs on an annual basis, in accordance with the Tennessee State Plan for Vocational Education.

4. A plan that will meet the standards of the school's accrediting agency, Commission on Occupation Education, Southern Association of Colleges and Schools, by providing employment information on all graduates for a minimum of five years.

5. A plan that would involve both instructors and student service personnel.

6. A plan that can be maintained without excessive effort or exorbitant cost.

IV. DELIMITATIONS

The scope of this study was restricted to five hundred twenty students of the Athens State Area Vocational-Technical School, who had completed an occupational title as defined in the Dictionary of Occupational Titles for the school years 1969-1970, 1971-1972 and 1973-1974.

The study was further limited since a follow-up of employers of former students was not included. Early leavers and drop-outs were also omitted since future follow-up studies will include them.

It was felt that in order to obtain more accurate data, the study would be limited to a one year, three years, and five years follow-up.

V. HYPOTHESES

The null hypotheses to be tested by the study were as follows:

1. There is no significant difference between the rate of return of the questionnaires and the different school years.

2. There is no significant difference between the rate of return of questionnaires of each training area and school years.

VI. DEFINITIONS

Follow-up study. A study which provided for an investigation of individuals who have left an institution after having completed a program, treatment or a course of study.

Vocational education. That phase of education designed to improve the proficiency of an individual for and/or in a specific occupation. It is either preparatory for a specific occupation or supplementary to the work of those employed in a specific occupation.

Occupational training areas. Training areas which are concerned with preparing persons for initial employment or for upgrading or retraining workers in a wide range of trades and industrial occupations. Instruction is provided in basic manipulative skills, safety judgment, related occupational information and through a combination of shop or laboratory experiences simulating those for industry and classroom learning.

Area vocational-technical school. A training center designated to serve both youths and adults from broad geographic areas by providing

technical instruction and skill training in trade, technical and other occupations.

Occupational title. Title for a specific job as defined in the Dictionary of Occupational Titles.

Dictionary of Occupational Titles. A dictionary used to define in broad all-inclusive terms, definition of job titles published by the United States Department of Labor.

VII. ORGANIZATION OF THE STUDY

Chapter I contains introduction to the study, statement of the problem, significance of the study, delimitation of the study, hypotheses, definition of terms, organization of the study, and summary.

Chapter II contains a review of related studies and implications.

Chapter III contains the procedure used in the development of an appropriate questionnaire and method followed in implementing the follow-up study.

Chapter IV contains the analysis of the data.

Chapter V contains the conclusions and recommendations.

VIII. SUMMARY

The purpose of this follow-up study was to develop a follow-up plan which can be utilized by administrative staff, student services department, and instructors of the Athens Area Vocational-Technical School for evaluating the total school program.

The present system of follow-up includes a birthday greeting card and questionnaire and reliance upon personal contact of former students by instructors or administrative personnel. This system has been unsatisfactory in providing necessary data to evaluate the school's training programs.

There is a need for a properly planned and implemented follow-up procedure to produce the necessary data to fulfill the objective of this study. The objectives of this study were to develop a plan that will provide statistical information concerning the job history of graduates for use by the administrative staff in planning and evaluation, a plan that will provide information for judgmental opinions concerning the school training programs for use in program evaluation by administrative and instructional personnel. A plan that will provide annual follow-up information to determine the effectiveness of training programs in accordance with the Tennessee State Plan for Vocational Education. A plan that will meet the standard of the school's accrediting agency, Commission on Occupational Education, Southern Association of Colleges and Schools, by providing information on all graduates for a minimum of five years. A plan that involves both instructors and student services department, and a plan that can be maintained without excessive effort or exorbitant cost.

CHAPTER II

REVIEW OF LITERATURE

Follow-up studies of graduates of vocational education programs, if carefully planned and executed, can provide an important base of information to school administrators, their staff and to future vocational-technical students (Little, 1970, p. 32).

In order to develop a follow-up plan that can be utilized by the administrative staff, student services department and instructors for evaluating the total school's programs, the following rationales and other follow-up studies were reviewed.

In 1964, Berndt completed a study of four hundred forty of the St. Paul Vocational-Technical School former students who began their trade training between September, 1955, and June, 1959. The primary purposes of his study were to obtain the number of graduates who had secured jobs in the field of their shop training, and the number of workers who had progressed in the same field. His secondary purpose was to establish and implement a system for recording cumulative record data for each student. The method used was a mailed questionnaire with a cover letter to solicit the cooperation of individuals by explaining the purpose of the study and usage of data received. The mailed questionnaires allow the respondent time to think through his answers and perhaps encourage him to honestly evaluate the course of study. The respondent would have some degree of anonymity if he were not required to sign his

name. The result of his study was an 88 percent returned questionnaires (Berndt, 1964).

The Michigan Department of Education, Division of Vocational Education, in 1965, published, Guidelines for Conducting Follow-Up Studies of Vocational-Technical Education Students, for the specific purpose of establishing guidelines for conducting follow-up studies of vocational-technical education students in Michigan. Steps suggested in initiating a follow-up study were: (1) establishing the purpose of the study; (2) determining the scope of the study; (3) planning the follow-up method; (4) tabulating the data; and (5) interpreting the data. In establishing the purpose of the study, four questions should be fully and satisfactorily answered. These questions pertained to what information is needed about the former student, what questions will elicit the desired information, will the information obtained in response to each item or question level itself to usable tabulation and of what specific value will each item of information obtained be to the school in light of the stated purpose of the study. It was suggested that a combination of personal interviews, telephone interviews and mailed questionnaires be utilized. Though it may not be feasible to interview personally all former students, it is desirable to interview a reasonable number. One value of the personal interview would be the "trial run" experience gained with the questionnaire. Often times mailed questionnaires have weaknesses in question construction; therefore, questions should contain clear, concise items in order to assume uniform interpretation of all questions. A plan for tabulating individual responses on an item-by-item

basis should be developed by the time the returns start to come in to the school. Interpreting the data received should suggest ways of improving the school's vocational programs, or it should confirm the adequacy of the existing programs (Michigan, 1965).

Mailey (1966) completed a study to develop a follow-up system which would efficiently follow students who have had vocational training in the state of Washington. The results would give local school administrators factual information on the productivity of vocational courses and would indicate whether the student was employed in the occupation for which he was trained. Steps outlined to generate a high percentage of responses were: to permit ease of administration, and to capture necessary data with which to make statistical reports and studies on the effectiveness of vocational preparatory training. The system used both psychological and mechanical methods of encouraging voluntary responses from former students and was designed to simplify paper work and actual follow-up activities at the school.

Mailey stated that perhaps the key in the entire system of response is the "conditioning" of the students while in school to respond to future questionnaires. The "conditioning" of the student could be done in several ways: (1) the instructor/student relationship is probably the most important way of conditioning the student, because a good instructor will be in contact with former students; (2) a more conscious awareness of the importance on the part of the instructors and students of the follow-up will help the instructor maintain a current file on former students; (3) the student could complete a sample questionnaire,

while in school, to avoid misunderstanding or question interpretation of the questionnaire; an entry and exit reminder should be completed, reminding the student that he would be expected to respond to a brief follow-up questionnaire in the future; and (4) an unmistakable understanding of the positive nature of the follow-up should dispel distrust at response time.

The mechanical method suggested by Mailey was the mailed questionnaire, to be accompanied by a first class mail envelope, preaddressed and prestamped. The former student would reply in ten days. A reminder questionnaire would be mailed after ten days to those who had not responded. After an additional ten days, a nonrespondent list would be mailed to the individual's course instructor. A card would be filled out by the instructor if he definitely knew the answers to the questions asked. Original mailing, reminder card and instructor personalized response card should result in an 85 percent response (Mailey, 1966).

In 1966, Tule completed a research project for the Carbon County School district in order to develop a guidance program for the Area Vocational-Technical Schools in Carbon County, Pennsylvania. In previous follow-up studies made by the Carbon County school districts, desired results had not been attained because of the small percentage of returned questionnaires. Tule stated that the problem was one of developing methods of attaining greater returns of requested data. According to him, the most effective method is the use of the birthday card, which former students receive on their birthday. The birthday card served a dual purpose by being a personal birthday greeting and a request for

information. He suggested two ways of getting better results. These were orienting students while in school of the necessity of follow-up information and using the birthday cards. The information requested, that could be usable, is basically vocational in nature, job qualifications, chances for advancement, hours of work, wages and potential increments, and new methods of work not taught at the vocational school. He further stated that follow-up information could be used for curriculum revision, improving guidance programs through the study of successful and unsuccessful cases, helping previous students in need of further services, presenting information to incoming students about post school education and work history of previous graduates, and to interpret follow-up data to the faculty so that they understand better what is happening to their students and the outcome of vocational-technical progress. He recommended that follow-up studies should be initiated on a one year, three years and five years basis. The results should be constantly evaluated in light of increasing technological changes (Tule, 1966).

Ehrisman, Evenson, and Fischer (1968) completed a study of six hundred, thirty seven graduates of the Manpower Development Training Act programs in North Dakota. This research report presents the results of a systematic organized effort to evaluate the effectiveness of the institutional parts of the MDTA programs in North Dakota. The design consisted of a mailed questionnaire followed by a 10 percent random sample of nonrespondents. The type of information secured from the mailed questionnaires included employed verses unemployed, type of

employment, level of age, and place of employment. The methodology used was a mailing of the questionnaire to all subjects. The people who did not respond on the initial mailing were again contacted by mail. A third and fourth mailing was conducted to all nonrespondents. The result of the follow-up study was a 61 percent response (Ehrisman, 1968).

The Wisconsin Board of Vocational-Technical and Adult Education (V.T.A.E.), published in 1970, a Guideline for Conducting Periodic Follow-Up Studies in the V.T.A.E. System. This guideline recognized that the success of the institution can best be measured by the success of the students. To ascertain the effectiveness of a school's program, there must be a follow-up from the day a student enters the institution until after he gains employment or transfers to another institution. This follow-up system would generate a high percentage of response by psychological means such as orientation of students who are in school, making appeals for assistance, and incentives; and mechanical means such as construction of questionnaire, easy response and stamped returned envelopes. The follow-up system would be administered at the school and capture the necessary data with which to validate statistical reports and studies on the effectiveness of vocational education.

The survey package to be implemented should be attractive, should provide for convenient return of the survey instrument, and should employ other proven incentive concepts in order to maximize returns. The survey package should include, but should not be limited to: (a) cover letter to explain the purpose of the survey to motivate promptness of response and to thank the individual for his assistance; (b) survey

instrument should be simple in design to facilitate ease of response, ease of administering, and should collect data such as name and location of employer, wages, method of placement, relationship to job training, job satisfaction and other training. Mailing of the survey package should be mailed immediately upon completion to recent graduates. A second mailing to nonrespondents should be initiated after a reasonable return deadline has passed (about fourteen to sixteen days). It was suggested the survey instruments be color coded as follows: Exit—white, Drop out—pink, Six months—green, Two and half years—red, Five and half years—yellow and Ten years—blue (Wisconsin, 1970).

In 1970, Leland D. Boone conducted a five years follow-up study of graduates of the Vocational-Technical Institute at Kansas State College at Pittsburg, Kansas. He stated that a follow-up of any training program is basically the only way the school has of evaluating the effectiveness of instruction and the strengths and weaknesses of the program. The system used by the Vocational-Technical Institute in the follow-up of its graduates was mimeographed form letters and questionnaires. Form letters and questionnaires were used since graduates found employment on a state-wide basis and it was not practical to contact them in person or by telephone because of the expense and time that would be involved. Questionnaires with transmittal letters were generally prepared in the fall semester and mailed with self-addressed, stamped envelopes to be returned within thirty days. After thirty days, a second mailing was made to nonrespondents. After an additional thirty days, a third mailing was sent to the remaining nonrespondents. After all questionnaires were

returned, information on the returned questionnaires was posted to follow-up records. Information provided by graduates related to salaries of graduates, progress being made in employment, whether graduates are still employed in the trade for which he trained, promotions, need for additional training, need for curriculum changes, effectiveness of instruction, and weaknesses of program. The results of this method will generally net a 65 percent return on the first mailing, 10 to 15 percent on the second mailing and 5 percent on the third mailing. Those student who are successful in school and employment are generally more complimentary and will respond more readily (Boone, 1970).

McKinney and Olegsley (1971) completed a report on Developing and Conducting Follow-Up Studies of Former Students in Kentucky. The primary purposes of the report was to develop a system which would involve significant groups in the follow-up study, determine the proper follow-up procedure, determine the group to follow-up and develop the follow-up instrument. They stated that the counseling service should be the agency most interested in the results of an evaluation effort. For the student, counseling is the primary area in which community employment needs and the aptitude and personal desires come together. Therefore, the results of a carefully planned and executed follow-up in conjunction with other aspects of evaluation will provide background information for productive vocational counseling. However, the instructor is the most important person in developing a positive attitude toward evaluation in regards to the student and parent. The instructor can literally "make or break" the evaluation effort. The school administration has the important role

of developing a positive attitude toward the follow-up study within the faculty.

In determining the follow-up procedure, the institution probably would make use of the mail questionnaire since it is the most frequently used. However, the major shortcoming of a mail questionnaire is the nonrespondents. In order for the evaluation efforts to be successful information from all programs must be obtained and not from just successful graduates.

There must be an accurate and complete definition of the groups to be studied. If the picture of the total educational effort is to be realistic, the follow-up study must include students who did not graduate as well as those who did graduate. Only those students who have been out of school long enough are able to reflect on the relevance and helpfulness of their previous educational experience.

In the development of the follow-up instrument, it logically follows that the instrument should be designed to gather information which will help to determine if the educational system is successful or should improve its program (McKinney and Olegsley, 1971).

In 1972, Sanders completed a study in which he developed a questionnaire that could assess the occupational and educational status of former occupation enrollees of North Carolina Community Colleges and Technical Institutes. In the development of a questionnaire, Sanders anticipated that seven areas of information would be identified. These areas included: (1) whether the individual responding was working; (2) whether he was working in a job for which he trained; (3) some measure

of his relative success by inquiring about the money he is making; (4) to what degree the school was responsible for his getting and keeping a job; (5) a measure of his satisfaction with course content; (6) his evaluation of instruction at the institution, and (7) a measure of the qualitative and quantitative aspects of the teaching medium. He found that the rate of return of questionnaires mailed with the respondent's name left off was approximately 1 percent more than the rate of returned questionnaires which had the respondent's name. Therefore, there is a slight probability of the rate of return increasing with the absence of the respondent's name (Sanders, 1972).

Pucel, in his Rationale and Methods of the Minnesota Vocational Follow-Up System (1973), stated that the major purpose of the Vocational Follow-Up System is to provide vocational educators, in the state of Minnesota, with information that will be valuable to them in making decisions concerning the improvement of vocational education programs. He indicated the need for an informational system is important in the development of the students in related skills and behavior which will allow them to become satisfactorily employed in an occupation related to their training. Therefore, the information system should determine if the occupational education programs are truly helping students accomplish this end.

In order for the occupational education system to be effective, Pucel stated that the system should be capable of gathering information concerning: (1) Labor Market and people demand for training programs; (2) skills learned that are not those needed in the occupation;

(3) those people admitted to the program that are not the kind of people who can and/or want to effectively apply the content presented in the program and (4) the instruction or methods of presenting the programs that are not adequate.

The information requirements of the follow-up system would require four instruments: (1) an instrument to gather the student addresses as well as biographical information upon student enrollment into area schools (Enrollee Information Form); (2) an instrument to gather information concerning how students terminate their enrollment (Termination Report Form); (3) a follow-up questionnaire to be sent to graduates one year after graduation; (4) an instrument to gather information from the employers of graduates (Pucel, 1971).

In 1973, Pucel, Nelson and Wheeler completed a six year research project to gather data on the relative success of one thousand one hundred and twenty-eight students one year after graduation, on the job. The problem was to test various procedures to maximize the percentage of mailed questionnaires returned. The method used in this follow-up study was to assign the names of one thousand, one hundred graduates randomly to eleven groups of one hundred each. The remaining twenty-eight names were used to informally test the questionnaire two weeks before the follow-up study began. Treatments or incentives were randomly assigned to groups. After persons were assigned to groups and groups assigned to a treatment, the mailing were prepared and mailed simultaneously. A daily record was kept of returned questionnaires. No reminders or other communications were sent during the four week period of study. The

findings of this study indicated that questionnaire follow-up returns might be increased substantially by increasing the number of novelties associated with mailed questionnaires. Increasing the number of incentives appears to bring about a higher rate from males than from females. Increasing the number of novelties or incentives also tend to reduce the time for persons to return mailed questionnaires (Pucel, Wheeler and Nelson, 1973).

I. SUMMARY

This review of other follow-up studies and guidelines, for developing a follow-up plan for evaluating the effectiveness of the Athens Area Vocational-Technical School's total programs, provided a number of major activities involved in developing a well-planned and implemented follow-up study.

The major activities include: (1) determining the need for follow-up studies; (2) establishing the general and specific objectives of the study; (3) determining the responsibility of supervising the study; (4) determining the scope of the study; (5) preparing the method of follow-up and (6) gathering, tabulating and interpreting data received.

The need for follow-up studies varied from study to study, but there is a general agreement that the best single method of evaluating the effectiveness of a school's training programs would be a follow-up of graduates. In determining the objectives of a follow-up study, questions such as what information do we want about each student, and

of what specific value will each item of information obtained be to the school in light of the stated purpose of the study, should be answered fully.

There are three major methods of securing data from graduates. These methods are the personal interview, telephone interview and mailed questionnaire. The personal interview is probably the best method, but one shortcoming would be the inability to contact a representative number of graduates for various reasons. The telephone interview would generally be impractical because of the cost and also inability to interview a representative number. The mailed questionnaire, the most frequently used to obtain follow-up data, is probably the most practical method. Shortcomings of the mailed questionnaire would be the problems of nonrespondents and cost.

A well-organized follow-up system should be initiated during the first year after a student leaves school and continued annually. However, due to cost and time involved, an annual follow-up might be unwise. Therefore, a one year, three years and five years should provide the necessary data to make an evaluation of the school's training programs.

The following chapter will provide the methodology used in the follow-up study. The remaining two chapters will include the analysis of data received, conclusions and recommendations.

CHAPTER III

METHODS AND MATERIALS

The development of a follow-up plan that can be utilized by the administrative staff, student services department, and instructors of the Athens Area Vocational-Technical School to evaluate the total school program, involved a sequence of well-planned and organized steps.

The initial steps were to determine the purpose and the objectives of the study. The superintendent, assistant superintendent, supervisor of student services and faculty representatives determined there was a need for a continuing method of securing data to properly evaluate the school's total program. It was further determined that the following objectives should be attained for total evaluation of the school's program: (1) a plan that will provide statistical information concerning job history of graduates for use by the administrative staff in planning an evaluation; (2) a plan that will provide information for judgmental opinions concerning the school's training programs for use in program evaluation by administrative and instructional personnel; (3) a plan that will provide follow-up information as to the effectiveness of programs on an annual basis in accordance with the Tennessee State Plan for Vocational Education; (4) a plan that will meet the standards of the school's accrediting agency, Commission on Occupation Education, Southern Association of Colleges and Schools, by providing employment information on all graduates for a minimum of five years; (5) a plan that would

involve both student services personnel and instructors; (6) a plan that can be maintained without excessive effort or cost.

Supervision of the study was the responsibility of the student services department. This department has the responsibility of recruiting, counseling, enrolling students and placement of graduates. Therefore, information related to salaries of graduates, progress in employment, opportunities for advancement, effective instruction, need for additional training and weaknesses of present programs would provide for productive vocational counseling.

It was determined by a follow-up committee composed of the superintendent, assistant superintendent, supervisor student service and faculty representative, that only those students who had completed a job classification as defined in the Dictionary of Occupational Titles, would be included in the study. The State Student Services staff had initiated a birthday card follow-up procedure that included all students who terminated their training either through completion or noncompletion. It was felt that noncompletions would be contacted through this procedure and only completions would be contacted by the school. It was further determined that an employer follow-up should be done as a separate study at a later date, since the former student would supply information necessary for an employer follow-up.

The mailing list of the students to be included in this study was developed from an alphabetical permanent record file of graduates by school years. It was determined that 520 students had completed their training during the 1969-1970, 1971-1972, and 1973-1974 school years.

An alphabetical listing was made of each student by training area and school year. The address for each was located in an alphabetical card file located at the school.

The mailed questionnaire was selected as the method to be used to collect data for this study. It was felt the mailed questionnaire was the most practical method to use because graduates are placed in different localities. The cost and time involved in the telephone interview method and the near impossible task of personally interviewing each student would be somewhat impractical for the school to undertake. Since the major shortcoming of the mailed questionnaire is the problem of nonrespondent, it was felt that a sufficient number of students would respond in order for the study to be effective.

In developing the questionnaire, questions were developed to provide information related to name and address of the former student, present job information, reason for attending school, how jobs were obtained, salaries, rating of the school, and suggestions for improving the school program.

The instrument questions were to be closed-end for easy tabulation on a single sheet of eight and one-half by eleven inch colored paper. The color code was yellow for the year 1969-1970; Red for 1971-1972; and Green for 1973-1974 (see Appendix A).

The cover letter to accompany each questionnaire included an appeal to assist the school in completing an evaluation program. The need for the requested information and the value it would be to the school, was also emphasized. The cover letter assured the respondent that his

response would be confidential. A date by which the questionnaire should be returned was included. The cover letter was signed by the supervisor of student services (see Appendix B).

After completion of the instrument and cover letter, it was pilot tested in two methods. The first method was the selection of fifteen former students using the Simple Random Sample by means of a table of random numbers.

On October 7, 1974, these former students were mailed a questionnaire accompanied by a cover letter and self-addressed, stamped envelope to be returned by October 15, 1974. Thirteen former students responded within time limit specified with all questions answered and no suggestions for change in the questionnaire. Eight of the thirteen responding were personally interviewed by the supervisor of student services. The results of these interviews provided additional information which indicated the questionnaire was too long and written questions relating to the instructor were answered in the positive with the students reluctant to express negative opinions even though some existed.

The second method of pilot testing the questionnaire involved the use of students currently enrolled in the Air Conditioning and Refrigeration class. The instructor gave each student an opportunity to read the questions to determine what changes should be made in question construction and format. It was suggested by these students that an introduction should be included and the questionnaire should be signed by the superintendent and cover letter signed by the instructors of each training area of the school. Otherwise, the construction of questions was satisfactory and information requested was not inhibitive.

In finalizing the research questionnaire, an introduction and a "thank you" from the superintendent was added to the questionnaire. It was felt that by including the introduction, it would familiarize the former student with the need to answer all questions and respond promptly. It was also felt that if the superintendent signed the questionnaire more students would respond.

It was determined by the follow-up committee that the question construction and format of the pilot questionnaire was satisfactory. As can be seen in comparing the pilot questionnaire (Appendix A) to the final questionnaire (Appendix D), the only changes were in question wording and not content.

Before making the first mailing, a master list of former students to be surveyed was made. Each student was assigned a number in numerical order by training area and school year. An example of the student coding used was AC-78-9. The AC student coding means Air Conditioning, the 78 was the seventy-eighth name on the list and the 9 was the school year 1969-70.

The first mailing of the questionnaire was made on November 13, 1974, to five hundred twenty students. The research package included a cover letter, properly coded questionnaire, and stamped addressed envelope. The cover letter and questionnaire were signed by the superintendent of the school. The deadline for returning the questionnaire was December 12, 1974. Returned questionnaires were filed numerically in a loose-leaf notebook and the respondent's name was marked with an R to signify a returned questionnaire has been received.

A second mailing was made to 305 respondents on December 16, 1974. One change was made in the second mailing. The cover letter was signed by the instructor of each speciality training area. The nonrespondents were requested to return the second questionnaire by December 31, 1974 (see Appendix E).

The results of the study were tabulated according to follow-up year and training area. A Chi-Square test of Independence was used to determine if there was significant differences in the rate of returns among the speciality training areas and the school years in which the student completed their training.

I. SUMMARY

The purpose of this chapter was to develop a follow-up plan and implement the plan in a sequence of well-planned and organized steps.

A follow-up committee of the administrative staff, student services department and faculty representatives determined the purpose of the study, objectives to be attained, and advised on questionnaire construction.

The mailed questionnaire was determined to be the most practical method of obtaining the data necessary to effectively evaluate the total school programs. Only those students who had completed a job classification as defined in the Dictionary of Occupational Titles in the school years 1969-1970, 1971-1972, and 1973-1974, were to be surveyed in this study.

The findings of this study were tabulated according to the follow-up year and training area, using the Chi-Square test of Independences.

The following chapters will include an analysis of the information obtained, conclusions, and recommendations.

CHAPTER IV

ANALYSIS OF DATA

In the development of a follow-up plan that can be utilized by the staff of the Athens Area Vocational-Technical School to evaluate the total school's program, a mailed questionnaire was selected as the method of obtaining information to measure the effectiveness of these programs. The questionnaire contained fifteen questions which dealt with present job, present location, employment status, relationship of vocational training to present job, reasons for attending the vocational school, classification of first job, number of jobs since leaving school, reason for changing jobs, method of obtaining first job, evaluation of school by student, average number of hours worked per week, average weekly pay, attendance at another school to learn a skill or trade, and improvements or additional services which the former student feels that the school needs to make.

The following presentation of data is from 308 respondents who responded to the above questionnaire: On November 13, 1974, 520 former students were mailed questionnaires requesting a response to each question. One hundred ninety (37 percent) returned the questionnaire before the deadline of December 12, 1974. Forty-seven (9 percent) of mailed questionnaires were returned as unclaimed. A second mailing was made to 308 respondents. One hundred eighteen (38 percent) responded before the deadline of December 31, 1974. Sixteen (5 percent) were returned as unclaimed.

Table I displays the number and percentage of returned questionnaires. The total return for the school years 1969-70 was eighty-eight (69 percent), 1971-72 was one hundred five (64 percent), and 1973-74 was one hundred fifteen (67 percent).

The employment status of former students responding is presented in Table II. Three hundred eight (100 percent) responded to the question. Forty (13 percent) were unavailable for employment due to attending college or entering the armed services. One hundred eighty-two (59 percent) were employed in the field for which they trained, nineteen (6 percent) in a related field, and fifty-three (17 percent) in a nonrelated field. Fourteen (5 percent) were unemployed and seeking work.

The data in Table III show that three hundred eight (100 percent) responded to the question, "Were you employed in your present job before enrolling in the training area?" Twenty-seven (9 percent) answered they were employed in their present job before attending school and two hundred eighty-one (91 percent) were not employed in their present job before entering the training area.

Two hundred ninety-three (94 percent) as shown in Table IV responded to the question, "Did training prepare you for your present job?" One hundred ninety-four (63 percent) indicated the training received prepared them for their present job, while ninety-nine (32 percent) did not think the training received prepared them for their present job. Fifteen (5 percent) did not respond.

The data in Table V shows that 80 percent of the former students responding attended the area school to learn a new skill; 7 percent

TABLE I

TOTAL RETURNED QUESTIONNAIRES
FIRST AND SECOND MAILING

Training Areas	1969-70	1971-72	1973-74	Total Returned	Total Percentage
Air Conditioning	3	4	10	17	55
Auto Body Repair	0	6	6	12	54
Auto Mechanics	8	6	6	20	62
Drafting	7	6	7	20	60
Electronics	6	7	8	21	69
Machine Shop	8	9	9	26	57
Masonry	0	3	9	12	55
Office Occupations	16	17	10	43	69
Welding	15	14	13	42	77
Practical Nurse	16	15	10	41	87
Nurse's Aide	8	13	15	36	69
High School H.O.E.	1	5	12	18	60
Total	88	105	115	308	67
Total Percentage	69	64	69	67	

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical school for the years 1969-70, 1971-72, and 1973-74.

TABLE II

EMPLOYMENT STATUS OF FORMER STUDENTS
1969-70, 1971-72, 1973-74

Training Area	Total Response	Unavailable For Employment		Employed						Unemployed	
				Field Trained		Related Field		Nonrelated			
		No.	%	No.	%	No.	%	No.	%	No.	%
Air Conditioning	17	1	5	9	53	0	0	7	41	0	0
Auto Body Repair	12	0	0	5	42	1	8	4	33	2	17
Auto Mechanics	20	2	10	10	50	1	5	6	30	1	5
Drafting	20	2	10	14	70	1	5	2	10	1	5
Electronics	21	1	5	12	57	2	10	5	23	1	5
Machine Shop	26	2	8	13	50	0	0	9	35	2	7
Masonry	12	1	8	5	42	2	17	4	33	0	0
Office Occupations	43	7	15	27	63	3	7	4	9	2	5
Welding	42	2	4	25	60	5	12	9	21	1	2
Practical Nurse	41	6	15	35	85	0	0	0	0	0	0
Nurse's Aide	36	5	14	24	67	2	5	1	3	4	11
High School H.O.E.	18	11	61	3	17	2	11	2	11	0	0
Total	308	40	13	182	59	19	6	53	17	14	5

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE III

NUMBER EMPLOYED IN PRESENT JOB BEFORE ENROLLING IN A TRAINING PROGRAM

Training Areas	Total Response	Yes	Percent	No	Percent
Air Conditioning	17	1	6	16	94
Auto Body Repair	12	5	52	7	58
Auto Mechanics	20	1	5	19	95
Drafting	20	2	10	18	90
Electronics	21	2	10	19	90
Machine Shop	26	7	27	19	73
Masonry	12	1	8	11	92
Office Occupation	43	1	2	42	98
Welding	42	7	17	35	83
Practical Nurse	41	0	--	41	100
Nurse's Aide	36	0	--	36	100
High School H.O.E.	18	0	--	18	100
Total	308	27	9	281	91

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the school years 1969-70, 1971-72, and 1973-74.

TABLE IV

DID TRAINING PREPARE FORMER STUDENT FOR PRESENT JOB

Training Areas	Yes	Percent	No	Percent	Nonresponse	Percent
Air Conditioning	9	56	7	44	1	6
Auto Body Repair	6	50	6	50	0	0
Auto Mechanics	9	45	10	50	1	5
Drafting	14	70	5	25	1	5
Electronics	11	52	10	48	0	0
Machine Shop	13	50	11	42	2	8
Masonry	6	50	6	50	0	0
Office Occupation	29	67	11	26	3	7
Welding	29	69	11	26	2	5
Practical Nurse	34	83	4	10	3	7
Nurse's Aide	30	83	5	14	1	3
High School H.O.E.	4	22	13	72	1	6
Total	194	63	99	32	15	5

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE V

REASON(S) FOR ATTENDING VOCATIONAL SCHOOL

Training Area	Number Responding	Benefits[a] Expected	Learn New Skill	Improve Skill	Employer Request	Other
Air Conditioning	20	5	14	1	0	0
Auto Body Repair	12	1	9	2	0	0
Auto Mechanics	24	1	17	6	0	0
Drafting	20	1	19	0	0	0
Electronics	27	5	20	2	0	0
Machine Shop	36	7	23	5	1	0
Masonry	14	1	12	1	0	0
Office Occupation	48	2	34	12	0	0
Welding	42	1	38	3	0	0
Practical Nurse	43	0	36	6	1	0
Nurse's Aide	38	0	37	0	1	0
Health Occupations (Secondary)	18	0	15	0	3	0
Total	342	24	274	38	6	0
Percentage of Total	100	7	80	11	2	0

[a]G.I., MDTA, Social Security, etc.

Source: Based on information from 308 of 457 former students responding to questionnaire.

attended to receive veteran's benefits, MDTA, Social Security, etc.; 11 percent wanted to improve a present skill and 2 percent attended school upon request of their employer. It should be noted that more than one reason for attending the area school was given in many responses.

The data in Table VI shows that two hundred six (70 percent) of the former students secured their first job after leaving the area school in the field for which they were trained, fifteen (5 percent) in related fields and seventy-four (20 percent) in a nonrelated field, eleven (4 percent) are continuing in school and three (1 percent) did not respond to the question.

The average number of jobs since leaving school indicated the longer a student has been out of school the more jobs he has had. As shown in Table VII, the mean number of jobs which students had for 1969-70 was 2.25 jobs, 1971-72 was 2.0 jobs, and for the year 1973-74 was 1.3 jobs. Nineteen (5 percent) did not respond to the question.

Table VIII shows that better pay, 35 percent, was the primary reason for changing jobs. Twenty-four percent indicated working conditions prompted them to change jobs; opportunity for advancement accounted for 21 percent of the reasons for changing jobs. Ten percent changed jobs due to lay-offs by employers. The remaining 10 percent did not specify a reason for changing jobs.

The method of obtaining the first job and the present job showed very little difference. The vocational teacher helped 24 percent secure their first job and helped 16 percent secure their present job. The guidance department was successful in securing 4 percent of both the

TABLE VI

CLASSIFICATION OF FIRST JOB

Training Areas	Field Trained	Related	Non-Related	Other	Non-Response
Air Conditioning	10	0	7	0	0
Auto Body Repair	6	0	6	0	0
Auto Mechanics	13	1	6	0	0
Drafting	14	0	5	0	1
Electronics	10	1	10	0	0
Machine Shop	17	5	4	0	0
Masonry	7	2	3	0	0
Office Occupations	34	2	7	0	0
Welding	28	4	9	0	1
Practical Nurse	40	0	1	0	0
Nurse's Aide	33	0	2	0	1
High School H.O.E.	4	0	3	11	0
Total	216	15	63	11	3
Percentage of Total	70	5	20	4	1

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE VII

AVERAGE NUMBER OF JOBS SINCE LEAVING SCHOOL

Training Areas	1969-70	1971-72	1973-74
Air Conditioning	2.6	1.3	1.3
Auto Body Repair	N/A*	2.3	1.0
Auto Mechanics	3.3	1.8	1.0
Drafting	1.1	2.3	1.3
Electronics	2.5	2.0	1.1
Machine Shop	2.3	2.0	1.2
Masonry	N/A*	3.3	2.9
Office Occupations	1.9	1.8	1.3
Welding	3.1	1.7	1.6
Practical Nurse	1.3	1.6	1.5
Nurse's Aide	1.3	1.6	1.0
High School H.O.E.	2.0	1.6	1.0
Total	2.3	2.0	1.3

*The information for the Auto Body Repair and Masonry training areas were not applicable since these areas did not begin until 1971.

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the year 1969-70, 1971-72, and 1973-74.

TABLE VIII

REASON(S) FOR CHANGING JOB

Training Areas	Opportunity for Advancement	Better Pay	Working Conditions	Lay-off	Other
Air Conditioning	2	5	3	1	2
Auto Body Repair	3	5	4	2	0
Auto Mechanics	7	7	6	0	1
Drafting	3	7	7	5	2
Electronics	6	7	5	1	1
Machine Shop	2	10	4	2	1
Masonry	2	6	2	2	2
Office Occupations	12	17	7	4	7
Welding	10	11	8	7	4
Practical Nurse	8	15	15	0	6
Nurse's Aide	4	6	4	2	2
High School H.O.E.	1	1	1	0	2
Total	60	97	66	28	28
Percentage of Total	21	35	24	10	10

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

first and present job. Family and friends helped 7 percent secure their first job and 6 percent of their present jobs. Only 3 percent relied upon want ads for their first jobs and present jobs. Three percent obtained their first job and 4 percent obtained their present job through employment agencies. Fifty percent of the former students obtained their first job on their own and 57 percent obtained their present job on their own. Other methods provided 1 percent of the first job and 4 percent of the second job. Eight percent of the students did not respond to questions (see Table IX and X).

The students rating of the school programs was on a scale of: Excellent—four points; Good—three points; Fair—two points; and Poor—one point. Teacher interest in the student was rated 3.46; quality of instruction was rated 3.42; job preparation 3.29; equipment 3.19; student counseling 3.16; preparation for job interview 2.96 and job placement 2.83 (see Table XI).

The data in Table XII shows the average hourly pay for all training areas combined was $3.61 per hour in 1969-70; $3.33 per hour in 1971-72; and $2.91 per hour for 1973-74. The hourly pay scale for each training area increased from year to year with exception for Auto Mechanics and Machine Shop, but lower than the hourly pay for the 1969-70 graduates. Those students who were enrolled in the High School Health Occupations training area received the lowest hourly pay. The 1973-74 Health Occupations graduates received less than the minimum wage.

The data in Table XIII shows that 20 percent of the students responding to question 14, "Did you attend any other school to

TABLE IX

METHOD OF OBTAINING FIRST JOB

Training Areas	Vocational Teacher	Guidance Department	Friends or Relatives	Want Ads	Employment Agency	On My Own	Other	Non-Response
Air Conditioning	1	0	2	0	0	14	0	0
Auto Body Repair	1	0	1	0	0	9	0	1
Auto Mechanics	4	2	0	1	1	11	0	1
Drafting	7	2	0	3	0	7	0	1
Electronics	2	3	3	2	0	10	0	1
Machine Shop	6	0	2	0	1	12	3	1
Masonry	0	0	2	0	0	10	0	0
Office Occupations	10	3	4	1	6	13	1	5
Welding	9	3	5	0	0	24	0	2
Practical Nurse	7	0	2	1	1	30	0	0
Nurse's Aide	23	0	0	0	0	10	0	3
High School H.O.E.	3	0	0	0	0	6	0	9
Total	73	13	21	8	9	115	4	25
Percentage of Total	24	4	7	3	3	50	1	8

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE X

METHOD OF OBTAINING PRESENT JOB

Training Area	Vocational Teacher	Guidance Department	Friends or Relatives	Want Ads	Employment Agency	On My Own	Other	Non-Response
Air Conditioning	2	0	1	0	1	11	2	0
Auto Body Repair	0	0	0	0	1	11	0	0
Auto Mechanics	2	2	0	1	1	13	0	1
Drafting	5	1	0	1	0	8	4	1
Electronics	3	4	2	1	0	10	1	0
Machine Shop	2	1	3	1	2	12	0	5
Masonry	0	0	1	1	0	11	0	0
Office Occupations	7	2	4	1	6	19	2	2
Welding	5	1	5	2	0	24	3	0
Practical Nurse	5	0	0	0	1	34	0	0
Nurse's Aide	17	1	1	0	0	14	0	3
High School H.O.E.	1	0	0	0	0	9	0	7
Total	49	12	17	8	12	176	12	22
Percentage of Total	16	4	6	3	4	57	4	7

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE XI

STUDENT RATING OF SCHOOL PROGRAMS

Training Area	Quality of Instruction	Equip-ment	Teacher Interest In Student	Student Counseling	Preparation for Job Interview	Job Placement Assistance	Job Prepara-tion
Air Conditioning	3.23[a]	2.61	3.35	3.05	2.73	2.60	3.54
Auto Body Repair	3.70	3.60	3.33	3.10	2.90	2.50	3.50
Auto Mechanics	3.75	3.60	3.55	3.21	2.83	2.83	2.81
Drafting	3.85	3.38	3.83	3.16	2.77	2.38	3.16
Electronics	3.80	3.05	3.55	2.88	2.94	2.80	2.85
Machine Shop	3.28	2.84	3.00	2.95	2.35	2.29	2.60
Masonry	3.63	3.27	2.81	2.54	2.20	1.80	2.63
Office Occupations	3.23	3.16	3.16	3.52	2.59	2.61	3.21
Welding	3.79	3.38	3.64	3.05	2.59	3.00	3.70
Practical Nurse	3.42	2.84	3.26	3.05	3.37	3.03	3.58
Nurse's Aide	3.55	3.51	3.87	3.74	3.56	3.80	3.83
High School H.O.E.	3.05	3.29	3.87	3.18	2.68	3.60	3.50
Total	3.42	3.19	3.46	3.16	2.96	2.83	3.29

[a]Excellent—4; Good—3; Fair—2; Poor—1.

Source: Based on information from 308 returned questionnaires of 457 former students of the Athens Area Vocational-Technical School for the years 1969-70, 1971-72, and 1973-74.

TABLE XII

AVERAGE HOURLY PAY SCALE

Training Areas	1969-70	1971-72	1973-74	Mean ($\bar{X}$)
Air Conditioning	4.48	4.17	3.52	4.06
Auto Body Repair	N/A*	3.36	2.57	2.97
Auto Mechanics	4.35	2.66	3.57	3.53
Drafting	4.18	3.44	2.98	3.53
Electronics	3.90	3.43	2.95	3.43
Machine Shop	3.30	2.95	3.00	3.08
Masonry	N/A*	5.11	3.08	4.10
Office Occupations	2.76	2.73	2.69	2.73
Welding	4.19	4.09	3.77	4.02
Practical Nurse	3.40	2.81	2.77	2.99
Nurse's Aide	3.13	2.66	2.26	2.68
High School, H.O.E.	2.18	2.63	1.92	2.24
Total Mean ($\bar{X}$)	3.61	3.33	2.91	3.28

*Information was not available since Auto Body Repair and Masonry training areas did not begin until the school year 1971-72.

Source: Based on information from 308 of 456 former students of the Athens Area Vocational-Technical School 1969-70, 1971-72, 1973-74.

TABLE XIII

ATTENDANCE AT OTHER SCHOOLS SINCE HIGH SCHOOL

Training Areas	Yes	Percent	No	Percent
Air Conditioning	4	24	13	76
Auto Body Repair	3	27	8	73
Auto Mechanics	2	11	17	89
Drafting	4	21	15	79
Electronics	6	29	15	71
Machine Shop	6	25	18	75
Masonry	1	8	11	92
Office Occupations	8	19	35	81
Welding	8	20	33	80
Practical Nurse	5	13	35	87
Nurse's Aide	10	28	26	72
High School H.O.E.	N/A*	N/A	N/A	N/A
Total	57	20	226	80

*Information related to high school students is not applicable since they were enrolled in a high school program.

Source: Based on information from 300 of 308 former students responding to question fourteen.

learn a skill or trade since high school?" answered yes, and 80 percent had attended the area school for the first time to learn a new skill or trade.

Question fifteen asked, "What improvements or additional services would you like to see the school provide, which we do not provide at the present time?" Most respondents were complimentary, but indicated there exists a need for better job placement assistance, better equipment, more related mathematics, and better communication with school and former students (see Appendix F).

The following hypotheses were tested using Chi-Square test of Independence.

Null Hypothesis: There is no significant different between the rate of return of questionnaires and the different school years investigated.

Null Hypothesis: There is no significant difference between the rate of return of questionnaires of each speciality training area and school years investigated.

The first hypothesis was retained. There were no significant differences between the rate of return of questionnaires and the different school years investigated. A Chi-Square value of .4773 was obtained with two degrees of freedom. In order for the difference to be significant the Chi-Square value msut equal or exceed 5.99 with two degrees of freedom.

The second hypothesis was also retained. There were no significant differences between the rate return of questionnaires among the twelve

speciality training areas for the three years investigated. For the school year 1969-70 the Chi-Square obtained was 9.0523. The Chi-Square obtained for 1972-72 was 2.8867 and for the school year 1973-74 the Chi-Square obtained was 4.067. In order for the difference to be significant the Chi-Square value must equal or exceed 16.9 with nine degrees of freedom and 19.7 with eleven degrees of freedom.

I. SUMMARY

The purpose of this chapter was to analyze the information obtained from three hundred eight former students who responded to a mailed questionnaire. Information obtained was to assist the school staff in determining the effectiveness of a mailed questionnaire follow-up plan in evaluation of the total school program.

From the results of this study the following information was obtained:

(1) Seventy-five percent of the former students secured their first job in the field for which they trained or a related field.

(2) Sixty-five percent have remained in the field for which they trained or related field since completing their training.

(3) Sixty-three percent indicated the training received prepared them for their present job.

(4) The average number of jobs since leaving school indicated the longer a student has been out of school the more jobs he has had.

(5) The primary reasons for changing jobs were better pay and better working conditions.

(6) Fifty percent indicated they obtained their first job and 57 percent obtained their present job on their own.

(7) The average weekly pay scale for all training areas combined increased as the length of time out of school increased.

(8) The results of the student rating of the school programs indicated the programs were functioning satisfactorily.

(9) The null hypothesis, "There is no significant difference between the rate of return of questionnaires and the different school years investigated," was retained.

(10) The null hypothesis, "There is no significant difference between the rate of return of questionnaires among the twelve speciality training areas for the three years investigated," was retained.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This study was to develop a follow-up procedure which can be utilized by the Administrative Staff, Student Services Department and instructors of the Athens Area Vocational-Technical School for evaluating the total school's program.

An attempt was made to meet the following objectives: (1) develop a plan that will provide statistical information concerning the job history of graduates for use by the administrative staff in planning and evaluation; (2) develop a plan that would provide information for judgmental opinions concerning the school's training program for use in program evaluation by administrative and instructional personnel; (3) develop a plan that will provide follow-up information as to the effectiveness of programs on an annual basis, in accordance with the Tennessee State Plan for Vocational education; (4) develop a plan that will meet the standards of the school's accrediting agency, Commission on Occupational Education, Southern Association of Colleges and Schools, by providing employment information on all graduates for a minimum of five years; (5) develop a plan that would involve both instructors and student services personnel and a plan that can be maintained without excessive or exorbitant cost.

The mailed questionnaire was selected as the most practical method of obtaining sufficient data to achieve the objectives stated above. Five hundred twenty former students who had completed a job classification as defined in the Dictionary of Occupational Titles, for the school years 1969-70, 1971-72 and 1973-74 were selected as the subjects of this study. Each student was mailed a questionnaire requesting a response to each question with a cover letter and self-addressed, stamped envelope.

The results of the study were tabulated according to follow-up year and training area either as a percentage of total or means.

II. CONCLUSIONS

From the results obtained, this study tends to show a sufficient number of former students will respond to a mailed questionnaire. It can be generally accepted the rate of returned questionnaires will not be sufficiently different between training areas and school years. The results show both positive and negative responses can be expected to questions so as to make the study more usable.

One other objective of this study was to provide statistical information concerning the job history of graduates for use by the administrative staff in planning and evaluation. In regards to this objective, the results tend to show a greater percentage of former students tend to be successful in securing initial employment in the field for which they trained or a related field. The former student was generally more successful in obtaining employment on their own. The assistance provided by the instructor and guidance staff tends to

be somewhat below that which might be expected and desired. On the whole, the former student tends to change jobs three times, with a greater percentage changing jobs for better pay. The employment status of former students tends to remain high in the field for which they trained or a related field, but the value of the training received generally decreased as former students progressed up the employment ladder. The pay scale increased as the length of time out of school increased.

In some instances, the former students gave more than one reason for attending the area school, but it can be generally accepted that most students enrolled for the purpose of learning a new skill or trade, or to improve upon a skill or trade in which they had already received training.

The results of the rating of the school program, show the former student felt teacher interest in the student, quality of instruction, equipment, student counseling, and job preparation were generally good. However, preparation for job interview and job placement assistance tend to have failed to accomplish what the student felt was satisfactory.

The questionnaire's format generally accomplished the objectives of this study, but the student counseling part of question 11 was not clearly understood. Most students rated the instructor instead of the counseling department. Question 14 was generally unacceptable since it was worded in a way which tends to be confusing as to the information requested.

For future follow-up studies it can generally be assumed that the following steps will be implemented in disseminating information obtained from a mailed questionnaire:

1. The administrative staff will analyze the data obtained to ascertain the degree of usefulness and effectiveness in planning of new programs and evaluation of present programs. Conclusions should be discussed with all instructors in a general staff meeting.

2. The administrative staff will meet with each instructor individually to analyze data pertaining to their training area. The degree of effectiveness of instruction and indication of any weakness which should be corrected will be determined. Results would generally be discussed with the instructor's craft advisory committee.

3. A general overall summary will be provided to the General Advisory Committee for information and study. It can generally be assumed that the Advisory Committee will provide assistance and suggestions in planning, job placement, job opportunities and evaluation.

4. An analysis of information pertaining to job placement, salary scale, job opportunities and problems encountered by former students will be made available to all students through hand-outs or posted on a bulletin board clearly accessible.

III. RECOMMENDATIONS

On the whole, this follow-up study accomplished the objectives which were stated in Chapter I. However, the following recommendations are suggested as a means of strengthening the method to be used to gather information from former students.

1. A more systematic follow-up procedure should be made yearly of those students who have completed a job classification as defined in the Dictionary of Occupational Titles. These students should be followed for a minimum of five years.

2. A more systematic follow-up method of noncompletions to be made during the first year a student leaves school. It is felt the information obtained would be more valuable during the first year after leaving for counseling purposes.

3. A compulsory job orientation program to include preparation for job interview for all students, be initiated immediately.

4. A more systematic method of providing job assistance to be coordinated by the student services department and instructors. It is felt that student services personnel should take a more active role in job placement assistance.

5. Communication between the school and former students be strengthened through a quarterly newsletter informing them of new training programs and job information.

6. This follow-up study involved only graduates of training, therefore, additional studies should be made to include graduates, nongraduates and employers to determine the effectiveness of the school's program as determined by all segments involved in the total educational effort.

7. There was a need to provide incentives to encourage a greater response to a mailed questionnaire. Therefore, more emphasis should be made during the preenrollment orientation program of the importance of responding and providing usable data.

8. To further emphasize the importance of responding to a mailed questionnaire, a personal exit interview be initiated one week before a student is scheduled to complete their training.

9. In order to systematize the follow-up procedures for all Tennessee Area Vocational-Technical Schools, additional follow-up studies should be made by other area schools.

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APPENDICES

APPENDIX A

Former Student Follow-Up Information

If your name or address has changed, please print correct information in blanks.

_____

_____

_____Zip_____

Area of Training:

May we know:

1. If employed, the firm's name and address:

   Name of firm _____

   Street or Box Number _____

   City, State, and Zip _____

   Name of Supervisor(s) _____

   What is your job title? _____

   May we contact your present employer? _____Yes_____No

2. Were you employed in your present job before entering the Area School? _____Yes _____No

3. What was your objective in taking training at the Area Vocational-Technical School?

   _____To learn a new skill and trade

   _____To improve a present skill or trade

   _____Requested by employer

   _____Other (specify)_____

4. If you are not employed, are you seeking work?_____Yes _____No

5. What was the job title of the first job you had after completing training at the Athens Area Vocational-Technical School?

_____

6. How would you classify your present job? (Please check one)

_____In the field you were trained by the vocational school.

_____Related to your training at the vocational school.

_____Not related to your training at the vocational school.

7. How many jobs have you had since leaving school? _____

8. Please check reason(s) why you changed jobs.

_____Opportunity for advancement

_____Increase in pay

_____Personal reasons (illness, family circumstances, etc.)

_____Job lacked personal satisfaction

_____Unsatisfactory relationship with supervision

_____Unsatisfactory relationship with fellow-employees

_____Other (please specify) _____

9. How did you obtain your jobs:

	Present Job	First Job
Through vocational teacher(s) supervision	_____	_____
Through school guidance department	_____	_____
Through friend(s) or relative(s)	_____	_____
Want-ads or job notices	_____	_____
Through state employment agency	_____	_____
On my own	_____	_____
Other (please specify)	_____	

10. Please rate the school frankly on items listed below:

	Excellent	Good	Fair	Poor
Quality of vocational instruction	_____	_____	_____	_____
Equipment	_____	_____	_____	_____
Teacher interest in students	_____	_____	_____	_____
Student counseling	_____	_____	_____	_____
Preparation for job interview	_____	_____	_____	_____
Job placement of students	_____	_____	_____	_____
Partial application of training on job	_____	_____	_____	_____

11. Your average weekly pay is:

_____$75-$99 _____$100-$124 _____$125-$149

_____$150-$174 _____$175-$199 _____$200-over

12. Have you previously attended another school for the purpose of learning a skill or trade beyond high school? _____yes _____no

13. What school did you attend? _____

14. Please list any suggestions for improving the vocational program (Please be frank)

APPENDIX B

October 7, 1974
P.O. Box 848
Athens, TN 37303

Dear Former Student:

We at the Athens Area Vocational-Technical School need your help. We are constantly trying to measure the value of our training program to the success of our students.

We need to know if you are working in the area for which you were trained, and how well we prepared you for your job. Since you received training here, we feel your information on the enclosed form will best help us evaluate our program and make any changes which may be necessary.

Please answer the questions on the enclosed form and return it to us in the enclosed, self-addressed, stamped envelope by October 15, 1974. The information given will be confidential.

We invite you to visit and allow us to serve you. Again, may we say thank you, and best wishes.

Sincerely,

Paul F. Walker
Supervisor of Student Services

PFW/gd

Enclosures: 2

APPENDIX C

November 13, 1974
P.O. Box 848
Athens, TN 37303

Dear Former Student:

Due to the increased emphasis on vocational training by industry and government, we at the Area Vocational-Technical School need your help. The need to measure the value of our training programs to the success of our students is tremendous.

Since you received your training here, we feel your information is the best method of evaluating our programs.

Please answer the questions on the enclosed form and return it to us in the enclosed, self-addressed, stamped envelope by December 12, 1974. The information which you give will be held in strict confidence.

We invite you to visit and allow us to serve you. Again may we say thank you, and best wishes.

Sincerely,

Superintendent
Athens Area Vocational-
Technical School

APPENDIX D

Student Follow-Up Information

Vocational education is being asked to do a better job of training people for employment. To do this job, we must have information upon which to base training programs that are offered or being considered as future offerings. No one is better qualified to provide this information than former students. Please take a few minutes right now and complete this form. All information volunteered will be held in strict confidence.

1. If presently employed:

   Name of company_____
   Street/Box/RFD Number_____
   City, State, and Zip Code_____
   Your job title_____
   Name of your Supervisor(s)_____
   May we contact your employer_____Yes_____No

2. If unemployed are you actively seeking work?_____Yes_____No

3. Were you employed in your present job before attending the Area Vocational-Technical School?_____Yes_____No

4. Did your training at the Vocational-Technical School prepare you for the present job?_____Yes_____No

5. If the answer to 4 above is no, please explain:_____
   _____
   _____

6. What was your reason(s) for attending the Vocational-Technical School?
   _____To take advantage of G.I. Benefits, Social Security, MDTA, etc.
   _____To learn new skill and trade
   _____To improve present skill or trade
   _____At request of employer
   _____Other (specify)

7. What type of job did you get immediately after leaving the Vocational-Technical School?_____

8. How many jobs have you had since leaving school?_____

9. Check reason(s) why you changed jobs:

_____Opportunity for advancement
_____Better pay
_____Better working conditions
_____Lay-off by company
_____Other (specify)

10. After leaving school, how did you obtain your jobs:

	Present	First Job
Through Vocational Teacher(s)	_____	_____
Through School Guidance Department	_____	_____
Through friends or relative(s)	_____	_____
Want-ads or job notices	_____	_____
State employment agency	_____	_____
On my own	_____	_____
Other (specify)	_____	_____

11. Rate the school frankly on items listed below:

	Excellent	Good	Fair	Poor
Quality of instruction	_____	____	____	____
Equipment	_____	____	____	____
Teacher's interest in students	_____	____	____	____
Student counseling	_____	____	____	____
Preparation for job interview	_____	____	____	____
Job placement assistance	_____	____	____	____
How effective has Vocational-Technical training been on your job	_____	____	____	____

12. Average number of hours worked per week:_____

13. Your average weekly pay is:

_____Less than $75 _____$75-$99 _____$100-$124

_____$125-$149 _____$150-$174 _____$175-$200

_____$200 or over

14. Did you attend any other school to learn a skill or trade since high school? _____Yes _____No. If yes, what school?

_____

15. What improvements or additional services would you like to see the school provide, which we do not provide at the present?

_____

_____

_____

_____

I appreciate your time and consideration in completing the information requested. The best of luck to you in the future.

Sincerely yours,

Superintendent
Athens Area Vocational-Technical
School

APPENDIX E

December 16, 1974
P.O. Box 848
Athens, TN 37303

Dear Former Student:

Several days ago a student information form was mailed to you. We needed information concerning your job history and your opinions about the school.

You may feel that your answer was not important, but they are important for many reasons. No one is better qualified to tell us what is right and what is wrong about the school than someone who has received training here. We would like to have a better job placement service and provide job information to both present and former students. We would like to know how well we are preparing students for the jobs they obtain.

Please take a few minutes right now and complete this enclosed form. It will be greatly appreciated by both Mr. Smith and myself. We need your reply by December 31, 1974.

The information you give us will be confidential and no names will be used so feel free to express your opinions.

Thank you for helping us. Stop in and visit anytime you are near the school.

Sincerely,

Zane Ferguson

APPENDIX F

Statements from Former Students

1969-70 School Year

"Some training in traffic, transportation and airline related fields."

"I'm not the least concerned."

"With the funds that are provided, I feel that the school has done an excellent job."

"Some instructions on heavy equipment would be helpful."

"Better preparation for job interviews and job placement assistance."

"More manufacturing oriented with emphasis on job interviewing."

"Provide more equipment and supplies to work with."

"Would like the number of hours completed at Vocational School to go toward a college degree."

"For younger students, I would like to see more personal counseling in how to deal with bosses."

"More on-the-job training and more up-to-date textbooks."

"A better job placement program."

"The Welding course was excellent. The instructor is the best welder I've seen."

"I think the supervisor of the school should maintain a good relationship with the area Trade Unions."

"Some courses that would assist in continuing education for L.P.N.'s."

"Additional courses in emergency care and emergency room nursing."

1971-72 School Year

"More electrical training in Air Conditioning field."

"A short course in small appliance repair."

"Less hours at school, better counselors, job placement after completion of courses."

"Better job placement."

"Better job placement service."

"More math for machinists, more variety of equipment. Short mandatory course in first aid for everyone."

"More class work and related math."

"Send former students notices of more advanced training available to them."

"Closer follow-up of students and help them get a job if they need one."

"I feel the instructors should give more individual attention and instruction to the students."

"I think on-the-job training programs would be helpful to the students."

"I feel that the areas of grace, grooming, poise, and personality traits were neglected."

"More blueprint reading. Treat veterans as veterans and not as school children."

"Be able to attend night classes without being an apprentice for the same thing during the day."

"The L.P.N. class needs to go deeper in its training. The hospitals expect you to know much more than you get in training, especially if you work as a charge nurse."

"Better student counseling."

"I feel the selection of nursing students should be better."

"Would like to see programs installed to help L.P.N.'s that have to work and financially unable to pay—get more schooling and work toward their R.N."

"More time in which to learn what is being taught. Personally I believe the P.N. program could easily be 1-1/2 to 2 years."

"More laboratory work in P.N. program."

"More updated modern equipment on which to learn."

"I would like to see an L.P.N. program at night."

1973-74 School Year

"Offer residential wiring to go along with Air Conditioning."

"More industrial and commercial refrigeration."

"Better job placement assistance."

"A small appliance repair shop."

"Recommendations to employers with Good, Fair, or Poor. Give new students an equal chance to work on the job. Do not discriminate because of personal dislike. Everybody doesn't want to be like the teacher."

"Better equipment in the Auto Mechanics Shop."

"I would like the teachers to get off their high horses and down on the students' level."

"A little better job placement service."

"More modern up-to-date test equipment. Television set of various manufacturers to study, test, and etc."

"Set up programs to let the students work with area employers of their training area."

"Different time schedule for students working midnight shifts."

"A course in plant maintenance, covering pneumatics, hydraulics, gear and pulley systems."

"A full-scale placement service. When employers of various companies could come by and talk with students from time to time."

"Closer attention paid to students and how they progress. Better equipment and better job placement assistance."

"More modern equipment. More courses, better tools. Better job placement."

"Better classroom instruction and more job placement."

"More on-the-job training."

"The teachers should teach the class instead of the students having to do it on their own."

"Better relationship with area business, so more students could be placed in jobs."

"I think a course for carpenters would be good."

"My training proved invaluable. It enabled me to get a good job. I can say the welding department is one of the best I've heard of or know of. I think vocational training is one of the best and least expensive types of education."

"There is a need for a math class."

"I think the school has excellent programs."

"More training on the supervisory level and medications. Less floor work. I have not given a bath or carried a bed pan since completion of my training."

"Better equipment."

"Better equipment and better communication between instructors."

"An increase in the staff of teachers plus advanced equipment allowing easier instruction in techniques and procedures."

"Just keep up the good work."

VITA

Paul F. Walker was born in Corbin, Kentucky, on January 19, 1936. He attended Etowah City public schools and was graduated from Etowah High School, Etowah, Tennessee, in 1953. He attended Tennessee Wesleyan College, Athens, Tennessee, until 1955. In September 1955, he enrolled at Tennessee Polytechnic Institute, Cookeville, Tennessee, where he received his Bachelor of Science in August, 1958. In 1958, he accepted a coaching and teaching position with the Graham County Department of Education, Robbinsville, North Carolina. In 1961, he accepted a teaching position with the Etowah City School System, Etowah, Tennessee. In 1965, he accepted a position in the Accounting Department of Hiwassee Land Co., Calhoun, Tennessee. In 1971, he joined the staff of the Athens Area Vocational-Technical School, Athens, Tennessee, as counselor.

He is married to the former Lorene Jones of Robbinsville, North Carolina, and they have two children, Jimmy and Pam.