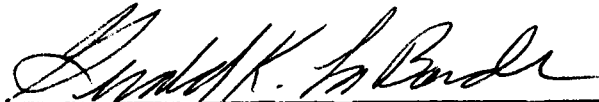
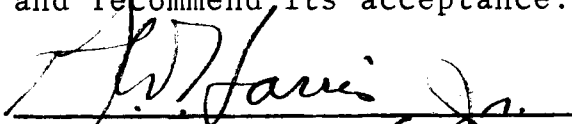
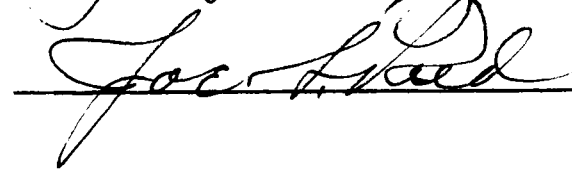


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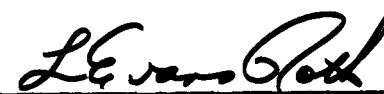
I am submitting herewith a thesis written by Richard Lee Bowling entitled "Development of a Follow-Up and Program Evaluation Involving a Comparison of the One and Two Year Graphic Arts Programs of the Knox County School System." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Industrial Education.


Gerald K. Laborde, Major Professor

We have read this thesis
and recommend its acceptance:

Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

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DEVELOPMENT OF A FOLLOW-UP AND PROGRAM EVALUATION
INVOLVING A COMPARISON OF THE ONE AND TWO YEAR
GRAPHIC ARTS PROGRAMS OF THE
KNOX COUNTY SCHOOL SYSTEM

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Richard Lee Bowling

March 1980

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ABSTRACT

The purpose of conducting this study was to collect data from the twenty-four graduates of the graphic arts programs of the Knox County School System for the years 1978 and 1979, so that information obtained from the former students could be used to inform and orientate the present and future students.

A combination mailed questionnaire and telephone interview sheet developed from which information was gathered, summarized, and tabulated. There were twenty questions grouped in primary categories of employment, unemployment, military service and continuing education. Of these twenty questions four were open-ended response items, one required a written response and the remaining sixteen were multiple choice. Responses were obtained from 75 percent of the twenty-four graduates.

A review of the data indicated that 34 percent of the graduates were employed in areas related to their training. All of the respondents were still residing in the community. The overall hourly wage for graduates who were employed in the training area was well above the minimum hourly wage as set forth by the Federal Government. Very positive feelings were expressed by all respondents toward the graphic arts program, although 56 percent felt that more class time should have been spent on employment preparation.

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CHAPTER I

INTRODUCTION

In 1971, the Tennessee State Advisory Council on Vocational Education set forth the following recommendations:

The council recognizes the need for and encourages the development of a more sophisticated system for gathering valid and usable program statistics and data for use in program planning and outcome studies with reference to completions, placement and employment retention . . . (Council Report, 1971, p. 3).

As pointed out in the above statement, it is the responsibility of the vocational educator to assist in providing this information for the local educational system.

In 1974, the General Assembly of the State of Tennessee allocated 197 million dollars to be used in the expansion and addition of new vocational and technical education programs for the students of high school and post high school ages. Due to state involvement, through legislation and appropriations, the students who enter existing and new programs are depending upon the administration and the individual instructors to provide the best possible learning experiences available. The instructor should help provide these essential experiences by being well informed and up-to-date about former students who received training in their respective vocational programs. Instructors who are conscientious obviously want to keep

abreast of the latest techniques and developments in the fields of technical trade area and education. It is therefore the responsibility of the instructor to update the program and curriculum.

I. PURPOSE OF THE STUDY

The main purpose of this research was to conduct a follow-up study of the graduates of the graphic arts programs at Byington-Solway and Farragut High School Vocational Training Centers to determine if they are gainfully employed in the graphic arts or industry related area for which they trained. Also, additional information was obtained from the graduates concerning employment, further education, salary, military services and overall feelings about the curriculum taught. This information was summarized and tabulated so that future graphic arts students might benefit from the information supplied by former students. In addition, information gathered from this study will be used to improve the present graphic arts curriculum.

II. IMPORTANCE OF THE STUDY

The following excerpt is taken from a letter written by William Harrison, Assistant Commissioner for Vocational-Technical Education in the State of Tennessee, 1974.

It is important that educators constantly study and evaluate the services provided for students

as a basis for planning improvements in those services. One aspect of such a study is to determine exactly how many (and how well) students are being served. This data system provides local, state and federal decision makers with basic numerical and managerial information about all aspects of vocational-technical education students in Tennessee (T.R.C.U. Guide, 1974-75, p. iii).

Based on the large sums of money allocated in 1974 and each year since and due to the fact that vocational education is made available to at least 50 percent of the high school students, it is imperative to conduct research on vocational graduates so that future students can be the benefactors of improved and constantly revised programs of instruction. Since vocational education is designed to train students for direct and related industrial employment, it is of the utmost necessity that research be conducted and utilized to its fullest extent.

III. OBJECTIVES

This study will deal with the following objectives:

1. To present the students with an accurate informational report, which relates present job market situations and local employment opportunities.
2. To determine the percentage of graduated students who are employed in the graphic arts or related field (relates to questions 1b,c,g;2a,b on the questionnaire).

3. To examine the feelings of the graduates toward the present graphic arts curriculum, so that alterations may be made as needed (relates to questions 1d,e;2c;4c,f on the questionnaire).

4. To establish whether or not the training received in their respective programs aided the graduates in obtaining employment (relates to question 1d on the questionnaire).

5. To determine where the graduates are presently residing (relates to Present Address on the questionnaire).

6. To learn if the graduates are continuing their education and their major area of study (relates to questions 4d,e on the questionnaire).

7. To assess the graduates' present position or job title (relates to question 1a on the questionnaire).

8. To determine the job turnover rate of the graduates (relates to questions 1f;2d on the questionnaire).

9. To establish the approximate hourly earnings of former students (relates to question 1d on the questionnaire).

10. To assess the feelings of the graduates of the graphic arts course toward other subjects taken while enrolled in high school and further to determine if they would recommend the graphic arts course to a friend (relates to questions 4a,b on the questionnaire).

IV. DEFINITION OF TERMS

The following definitions are proposed for this study:

Follow-up Study--Denotes the collection of data from course graduates concerning the curriculum offered so that necessary adjustments or alterations may be made to benefit the future students who enroll in the program.

Graphic Arts--Denotes a field of many specialized activities, which incorporate methods and procedures to produce printed products and all related functions when necessary for this goal.

Questionnaire--Pertains to the written instrument used to collect data from the graduates of the program.

Graduates--For this particular study refers to the graduates of the Byington-Solway and Farragut Vocational Centers, who successfully completed the two year graphic arts programs of their respective schools.

Other Subjects--Refers to courses, excluding graphic arts, taken for academic credit.

V. LIMITATIONS OF THE STUDY

This study was confined to the two schools in the Knox County School system which offered graphic arts as part of their vocational curriculum. They are Byington-Solway Vocational Training Center, located in northwest

Knox County, serving two feeder schools of the surrounding communities of Karnes and Powell, and Farragut Vocational Training Center, located in southwest Knox County and serves the Farragut community. Further this study involved students of these schools who had completed two years of vocational training.

VI. ORGANIZATION OF THE STUDY

Chapter I consists of the introduction, purpose of the study, importance of the study, objectives of the study, definition of key terms, limitations of the study and the organization and development of the study.

Chapter II provides a review and summary of the literature available on follow-up studies.

Chapter III represents the methods and procedures used in conducting this study.

Chapter IV reports the findings that were concluded from the survey instrument.

Chapter V contains the summary, the research conclusions, and the recommendations.

Chapter V is followed by the Bibliography, the Appendices, and the Vita.

CHAPTER II

LITERATURE ON FOLLOW-UP STUDIES

Due to the important legislation of the 1970's and its impact on vocational education, a number of follow-up studies were conducted. The suspected reason for increase of follow-up studies is the demand for trained workers placed on the vocational education community. By conducting more and more follow-up studies, valuable information and statistics may be gathered from the work force concerning the needs and trends of the community.

I. REVIEW OF THESES

In preparation for this particular study, a number of theses dealing with follow-up studies were reviewed. It was then decided to select and make reference to information gathered in the 1970's. There were no existing studies available dealing with the vocational graphic arts programs, although three studies were narrated because of their similarity in the data gathering and reporting techniques.

Pennington (1971) reported the findings of a follow-up study involving the graduates of Kirkman Technical High School. The objective of this study was to determine the effectiveness of the trade and industrial shop programs being offered by that facility and also to establish the value of the related training program.

A mailed questionnaire was used to contact 125 graduates. Of the 125 sent out, 102 were completed and returned. The questionnaire dealt with topics such as present employment status, salary range, residential location, length of time and method of securing first employment, and the value of vocational training on the job.

The results of this study revealed that over one-half of the graduates were working in the vocational area or closely related area for which they trained.

It was discovered that 90 percent of the graduates still residing in the community. Also two-thirds of the graduates were employed within three months after graduation, and the jobs were secured mainly through their own efforts or with the assistance of parents or friends. It was noted that the school played a very small role in the placement of these graduates. The graduates reported that those employed in a direct or related area felt they benefited greatly from the vocational training received. Those graduates employed in unrelated fields realized little or no benefit from their vocational training (Pennington, 1971, p. iii).

Witcher (1973) conducted a follow-up study involving 131 secondary and twenty-five post secondary vocational and technical graduates at the Bristol-Sullivan Technical School. Information was taken from school records and also gathered

by questionnaire. The instrument consisted of twenty-six items focusing on four general areas and included questions dealing with attitudes toward training, employment, additional advanced training and/or military service. Responses were received from 78 percent or 122 of the 156 graduates.

An analysis of the data indicated that 44 percent or sixty-nine of the graduates were employed in the area or related areas related to their respective field of training. Also it was discovered that 89 percent-or 139 of the graduates still reside within the community or nearby surrounding area. More than two-thirds of the graduates rated their training above average or excellent. Sixty-six or 54 percent of the graduates pursued advanced training in their respective areas (Witcher, 1973, pp. iii-iv).

Gonce (1975) conducted a follow-up study involving seventy-one graduates of the vocational woodworking program at the Morristown-Hamblen East-West High School for the school years 1971 through 1974. The questionnaire developed for this particular study contained twenty-five questions. The questions were grouped under four main categories (employment, unemployment, military service, and educational). Of these twenty-five questions, five were fill the blanks, one required a written response, and the remaining nineteen were multiple choice. Responses were made by fifty-six or 79 percent of the seventy-one graduates polled.

A review of data indicated that 88 percent of the graduates were still residing within the community. Less than half (32 percent) were employed in the area or related area for which they trained. Over half of the graduates, 55 percent or thirty-nine of the graduates reported that the vocational training received was helpful in obtaining employment. Seventy-six percent or fifty-four of the graduates were found to be gainfully employed, whereas 24 percent or seventeen were found to be unemployed. Forty-three percent of the graduates are still employed in their first job. Sixty-five percent of the graduates reported that the vocational training that was received was beneficial in preparation for their present job (Gonce, 1975, pp. iii-iv).

II. REVIEW OF LITERATURE

There are a number of documents in print that deal with follow-up studies. After several were reviewed, three were selected to be included in "literature on follow-up studies." The information contained in these studies proved to be invaluable in formulating the guidelines, instrument construction and follow-up procedure.

Purcel et al. (1970) formulated a study dealing with the "eye appeal" and readability of the polling instrument. It was suggested that if the instrument was constructed properly; using logical question organization;

clear; unambiguous wording and unbiased phrasing; is to the point; reproduced on colored paper; avoids the use of the word "questionnaire" and keeps the directions concise, but distinct, the overall return rate will be of greater success. Further it was suggested that the return rate may be increased by using a return addressed, stamped envelope versus a bulk rate or business envelope. Also it was suggested that a personalized cover letter inviting participation and a deadline for return would aid in authenticity. And finally assure the respondent that confidentiality will be exercised in the details of the report (Purcel et al., 1970, p. 3).

McKinney et al. (1971) in a publication, reported on developing and conducting a follow-up of former students. The following are excerpts which were felt to be essential in conducting a follow-up study.

1. Developing and conducting follow-up studies of former students--The focus of most evaluation efforts should be on the product or outcomes of the educational system. This emphasis on the output of the educational system means that we need to look at the former students of that system to assist in determining the effects of the educational system on the former student. One of the ways of securing information about former students is to conduct a follow-up study of the former students.

2. What is a follow-up study?--A follow-up study is a procedure for accumulating pertinent data from or about individuals after they have had similar or comparable experiences. It is important to remember that follow-up implies the collection of data about something which has already taken place. In other words students are asked to reflect back on how the program in question either prepared him or failed to prepare him for his future work. It

should be remembered that follow-up studies are not the complete answer for evaluating educational systems. They are but one important component of a larger design for evaluating the educational endeavor.

3. Why conduct a follow-up study?--The decision whether or not to conduct a follow-up study must evolve from the objectives of the total evaluation effort. Once these objectives have been determined, one can then proceed to identify the kinds of information needed to answer the questions raised by the educational program objectives.

Several techniques and procedures may be necessary to get the needed information. A former student follow-up study may be one of selected procedures for information gathering.

4. Purposes of the follow-up study--Generally the follow-up study should obtain information which assists in determining the extent to which the objectives of the educational system are being met. There are other "side effects" discussed in the paper.

In most cases the follow-up study will be in the nature of a self-survey. As such the follow-up study may produce benefits beyond that of data collection and analysis. It can act as a motivating force for change.

The follow-up study is more closely concerned with the "community within a community"--that of the educational system. The school system includes teachers, school administrators, students, parents, the board of education and (hopefully) vocational education citizen advisory committees, all of whom have a vested interest in the outcomes of the educational system. Since so many groups and individuals are involved, the follow-up study has the potential for uncovering conflicts which may be existent in the overall educational community. In some cases a follow-up study (or most procedures or techniques used in evaluation) may be seen as a threat to individuals or particular programs. At the very least, a follow-up study will probably indicate areas requiring change of some sort--addition of new programs, deletion of others or revision of existing programs. Groups or individuals closely associated with programs which are identified as those requiring change will naturally be most affected by the results of the follow-up. It is, therefore, exceedingly important that all interested parties be actively involved in the follow-up study (McKinney et al., 1971, pp. 5-6).

Ohio State University (1976), in a professional training module, assessed the planning and conducting of a student follow-up study and came to the following conclusions:

1. In order to effectively and efficiently manage the follow-up study effort, it is necessary to develop a plan for conducting the study. The plan should be developed by the vocational teacher with advice and input from other vocational teachers, the school counselor and principal, a student committee, the board of education, an advisory committee and other appropriate staff members.

The plan should contain information regarding the parts of the sample plan outline which follows.

PLAN FOR CONDUCTING FORMER STUDENT FOLLOW-UP STUDY

1. A general description of the situation;
2. Written philosophy and objectives for the follow-up study;
3. Responsibilities of the groups involved in the study;
4. Identification of the boundaries or limitations;
5. Activities to be conducted to assist in attaining the objectives of the follow-up study;
6. Budget items and estimated costs;
7. Schedule of activities;
8. Reporting procedures; and
9. Plans for implementing the findings.

2. Determining the follow-up procedure--One approach to conducting follow-up studies which has proven successful is the interview technique, either in person or by phone. Personal interviews are probably the most desirable kind of follow-up because they provide the opportunity to ask questions of clarification which may provide deeper insight into the problems of occupational preparation as perceived by the former students. Personal interviews, however, can be very expensive and require a great amount of time. The telephone interview can be effectively used on a sampling basis. One is limited to the amount of information which can be obtained, but the telephone interview may be the only workable

procedure for some segments of the population. Often a combination of mail questionnaires and personal interviews of a sample of nonrespondents is used.

3. Determining the groups to follow-up--There must be an accurate and complete definition of the group or groups to be studied. If the wrong people supply the data, the results will be invalid. Follow-up studies may be organized to cover a single occupation, several occupations in a service area, or to cover all service areas in which the school offers occupational studies. In the past, most follow-up studies have been made of a single service area.

Only those out of school for a year or more should be included in the follow-up study. Former students being followed-up should have been out of school a sufficient length of time to be able to reflect on the relevance and helpfulness of their previous educational experience. It must be remembered, however, that the longer former students have been out of school, the greater problem they will have of separating the value of their educational experience from the influence of non-educational activities. Also, the longer they are away from school, the less valid their judgments about the current educational program are likely to be. Schools have most often followed-up students who have been out of school from one to six years (Ohio State University, 1976, pp. 16-19).

III. SUMMARY

In summary, the follow-up study of former students requires a specific methodology. The most universal approach to this type of study appears to be the mailed questionnaire. Due to its flexibility, inexpensiveness, and confidentiality it affords the respondent the assurances of confidence and of not being coerced to respond.

CHAPTER III

PROCEDURE FOR THE STUDY

This chapter will deal in depth with the request and approval of the research, the population, the development of the research instrument and the collection and analysis of pertinent data.

I. APPROVAL FOR RESEARCH

During the Methods of Research course, the idea of conducting a follow-up study became reality. The topic of this study began as an outside assignment. Upon completion of a thesis proposal it became apparent that a follow-up study involving the two graphic arts programs of the Knox County School system was needed. Initial approval was obtained from the major advisor of the Industrial Education Department of The University of Tennessee, Knoxville. Permission for conducting local research was granted from the Supervisor of Vocational Education for the Knox County School System. A formal thesis proposal was presented for review and approved at departmental level. The proposal along with a request for human subject research was submitted to and approved by the Graduate Research Committee at the time the research began.

II. POPULATION

The specific purpose of this study was to provide up-to-date information on the graduates of the two graphic arts courses being offered in the Knox County School System. Since these are two new Vocational Centers, the population will be limited to the 1978 and 1979 graduates of the program, which will consist of twenty-four students who have completed a full two year training program.

III. QUESTIONNAIRE DEVELOPMENT

From the review of literature it was determined that the best approach to this study would be the mailed questionnaire. The mailed questionnaire affords the respondent the convenience and confidentiality needed to assure an unbiased response to the information requested. Further it allows the respondent time to recall specific happenings in the classroom setting, which otherwise may not surface using any other data collection method.

A composite was prepared using selected questions and other information which was felt to be of value to this study. A rough draft of the proposed questionnaire was presented to the students now enrolled in the graphic arts program at Byington-Solway Vocational Center. The students were asked to review and ascertain its readability. Upon completion of this task the final draft was presented to

the Graduate Committee for approval. The final draft was approved and copies were mailed to the graduates.

The questionnaire consisted of twenty questions grouped in four primary categories (employment, unemployment, military service, and education). Of these twenty questions, four were open-ended response items, and the remaining sixteen were multiple choice. (A copy of the questionnaire is included in Appendix B.)

IV. DATA COLLECTION

A list of the graduates' names and addresses was obtained from the Knox County Schools Vocational Transition Program and file cards were prepared on each individual graduate. These file cards listed the graduate's name, address, telephone number, school and year of graduation. The graduates were grouped by school and year of graduation. Each graduate's file card was given a code number for cross reference upon return questionnaire (Table I).

The following steps were used in the collection of data from the graduates:

1. An explanation or cover letter (included in Appendix A) along with the questionnaire, informed consent form (included in Appendix C) and self-addressed stamped envelope were enclosed in the information packet. Each graduate was encouraged to return the information within two weeks after receipt. From the twenty-four requests

TABLE I
GRADUATES WHO COMPLETED THE TWO YEAR
GRAPHIC ARTS PROGRAM

Year	Farragut	Byington-Solway	Total
1978	5	4	9
1979	5	10	15
Total	10	14	24

sent out, ten were returned completed within two weeks; three were returned due to no forwardable address. This indicates an initial response of 42 percent of the twenty-four sent out.

2. As a final step, an attempt was made to contact the remaining graduates who did not respond within the requested time. Of the remaining twelve graduates eight were contacted by telephone and responded to the questionnaire. These additional eight contacts brought the final total of respondents to eighteen or 75 percent of the entire population (Table II).

V. DATA ANALYSIS

For the purpose of confidentiality, each graduate was assigned a code number, which was noted on the file card, informed consent form, and the questionnaire. As the questionnaires were returned, notations were made on the file cards so that accurate records of the respondents could be made. Further, those graduates who were contacted by telephone reflected the date and time of the interview.

After a reasonable time had lapsed, it was determined that no further responses would be made. The information obtained from the mailed and telephone interviews were tabulated and recorded on the final tables which are included in this study.

TABLE II
RESPONSE RATE OF FORMER VOCATIONAL GRAPHIC ARTS
STUDENTS TO FOLLOW-UP INSTRUMENT

Type	Initial	Secondary	Unclaimed	Responded	Percent
Mail	24	0	3	10	42
Telephone	0	12	4	8	34
Total	24	12	7*	18	75

*Note: Of the seven unclaimed there were three without forwarding addresses and the remaining four were not listed in telephone directories.

In order that this study would meet the specific guidelines of The University of Tennessee, Knoxville, the Committee on Research Participation set forth the agreement that all materials, including questionnaires, informed consent forms and file cards be kept for a minimum of three years from the completion date and at that time be destroyed.

CHAPTER IV

FINDINGS

This chapter details the data returned by eighteen of the respondents to the twenty-four questionnaires mailed out. Only those students who completed two years of training ending in 1978 and 1979 were included in this study. Due to the fact that both Byington-Solway and Farragut Vocational Centers have been open since 1976, only two years of graduating students were available for study at this time (see Table I, page 18, for specific school breakdown). Since the graduates of 1977 were offered only one year of training, it was felt that in order to make the study more accurate, it was to be restricted to the two year programs and not as the title implies.

Table II indicates that twenty-four letters were mailed to former students and ten were returned completed within two weeks. An additional three were returned due to no forwarding address, which gives an initial return rate of 42 percent. A check was made in various directories for some possible means of locating the remaining graduates. Of the twelve who did not respond, an additional eight were contacted by telephone, which brings the total response to 75 percent.

The remaining portions of this chapter will deal specifically with the data obtained from the eighteen respondents.

Table III indicates that 34 percent of the respondents were employed in a specific area of graphic arts. These six were employed as follows: 1-Pressman; 1-Binder; 1-Design and Layout; 1-Darkroom Technician; 1-Press and Bindery; and 1-Typesetter. It was found that the high unemployment rate of 45 percent was due to the fact that the majority of the graduates are full-time students involved in specialized training or college. The remaining 21 percent were employed either part-time and attending school or full-time in a non-related area (construction). This question represents a 100 percent response from the eighteen respondents.

Table IV presents the approximate hourly wage, excluding overtime, of the group. It was found that none of the working graduates, regardless of full or part-time employment, earned less than \$3.00 per hour.

The average wage for the entire group was \$2.82 per hour. The six graduates employed in the graphic arts field earned an average of \$3.92 per hour. It should be noted that these figures include some unemployed graduates whose salary was reported as 0 (Table IV). There were five earning 0 which represents 27 percent. One of the graduates reported a wage of \$3.00 per hour. Five

TABLE III
EMPLOYMENT STATUS OF THE GRADUATES OF THE GRAPHIC
ARTS PROGRAMS FOR 1978 AND 1979

Year and School	Employed in Area	Employed in Related Area	Employed in Other Area	Unemployed
Byington- Solway				
1978	1	0	0	3
1979	3	0	2	4
Farragut				
1978	2	0	0	0
1979	0	0	2	1
Total*	6 (34%)	0 (0%)	4 (21%)	8 (45%)

*Note: These figures are taken from the
eighteen or 100 percent of the respondents.

TABLE IV
APPROXIMATE HOURLY WAGE (EXCLUDING OVERTIME)
RECEIVED BY FORMER GRAPHIC ARTS STUDENTS

Year and School	Dollars					Average
	0	3.00	3.50	4.00	4.50	
Byington-Solway						
1978	2	0	2	0	0	1.75
1979	3	1	2	0	3	2.64
Farragut						
1978	0	0	0	1	1	4.25
1979	1	0	1	2	0	2.66
Total	5	1	5	3	4	2.82*

*Note: Although the average overall hourly wage is \$2.82, the average overall wage for the six graduates in the graphic arts or related area was \$3.92 per hour.

reported earnings of \$3.50 per hour. Three reported earnings of \$4.00 per hour and four reported earnings of \$4.50 or more per hour. All six of the graduates employed in the graphic arts field ranged from \$3.00 per hour to \$4.50 per hour, depending on the job and employer.

Table V deals with the job stability of the graduates. The number of jobs held by the former students ranged from two who have not been employed since graduation to one who has had more than five jobs within two years. Thirty-three percent had maintained one job since graduation. It was found that of the six in the graphic arts field, job stability ranged as follows: one had five or more jobs; one had one job; two had two jobs; one had three jobs and one had four jobs. This information reflects that they were the more unstable of the group. The above jobs were not in the graphic arts area or related areas.

Table VI reports that eighteen or 100 percent of the graduates would recommend their respective graphic arts classes to friends to take as a vocational program in high school. All respondents, whether in or out of the field of graphic arts, felt that the program was worthwhile. The majority of the respondents rated the graphic arts course better than or equal to other academic or vocational courses taken for high school credit (Table VII).

TABLE V
NUMBER OF JOBS HELD BY RESPONDENTS SINCE
GRADUATING FROM HIGH SCHOOL

Year and School	Number of Jobs					
	0	1	2	3	4	5 or More
Byington-Solway						
1978	0	0	1	1	1	1
1979	1	5	2	1	0	0
Farragut						
1978	0	0	1	0	1	0
1979	1	1	1	0	0	0
Total	2	6	5	2	2	1

TABLE VI
 RESPONSE TO WHETHER THE GRAPHIC ARTS PROGRAM
 WOULD BE RECOMMENDED TO A FRIEND TO TAKE
 IN HIGH SCHOOL

School and Year	Yes	No
Byington- Solway		
1978	4	0
1979	9	0
Farragut		
1978	2	0
1979	3	0
Total	18 (100%)	0

TABLE VII

RATING OF VOCATIONAL GRAPHIC ARTS PROGRAM TO OTHER
ACADEMIC OR VOCATIONAL PROGRAMS TAKEN BY
RESPONDING GRADUATES

School and Year	Good	Fair	Poor
Byington- Solway			
1978	4	0	0
1979	9	0	0
Farragut			
1978	1	1	0
1979	3	0	0
Total	17	1	0

and one optional or "Other" block to identify the areas of the curriculum that there might be a need for more training. One felt Safety and Orientation needed more time. One suggested more Design and Layout. One felt that more time should be spent on Darkroom Technique. Three felt that more time should be devoted to Press Operations. Over one-half, 56 percent of the graduates, felt that more time should be taken by the instructor to prepare them on employment interviews and application procedure. Two graduates marked "Other," one response suggested more Bindery instruction and one response indicated a need for more Photography instruction (Table VIII).

Table IX indicates that 56 percent of the graduates did not pursue additional training or education after graduation. Three of the graduates were enrolled in a college related area of instruction (advertising, mass communication and journalism). One graduate was in a non-related college program (wildlife management). One student who pursued post secondary related training graduated from Farragut and upon graduation attended evening classes for additional training at Byington-Solway. Two or 11 percent of the graduates were involved in post secondary or non-related areas such as travel agency management and construction engineering.

TABLE VIII
AREAS IN WHICH RESPONDENTS FELT ADDITIONAL
TRAINING TIME SHOULD BE SPENT

Area	Byington-Solway	Farragut	Percent
Safety and Orientation	1	0	5.5
Lay-out and Design	1	0	5.5
Darkroom Technique	1	0	5.5
Press Operation	3	0	16.5
Preparation for Employment	5	5	56.0
Other*	2	0	11.0
Total	13	5	100.0

*Note: The two responses representing other were for more photography and bindery.

TABLE IX

RESPONSES OF GRAPHIC ARTS GRADUATES WHO ARE NOW
ATTENDING OR HAVE ATTENDED POST SECONDARY OR
COLLEGE TRAINING SINCE GRADUATION

School and Year	None	Post Secondary Related	Post Secondary Non-Related	College Related	College Non-Related
Byington- Solway					
1978	0	0	2	1	1
1979	7	0	0	2	0
Farragut					
1978	1	1	0	0	0
1979	2	0	0	0	1
Total	10 (56%)	1 (5.5%)	2 (11%)	3 (16.5%)	2 (11%)

In summary, all graduates who were employed were earning above the minimum wage. Not all of the graduates were employed in the graphic arts field, but those who were enjoyed a much higher hourly wage. All the graduates felt the training that they had received was worthwhile and indicated that the course would be recommended to a friend to take as a vocational training program. Over one-half of the graduates felt that more time should be devoted to employment preparation. And finally only 44 percent were continuing their education.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The main purpose for conducting this study, of the graduates of the vocational graphic arts programs of the Byington-Solway and Farragut Vocational Centers, was to obtain information from the former students that would better inform and orientate the present and future students in the employment field and assist the instructor in his program. The preceding chapters provide data about former graphic arts students, which could be of benefit to future graphic arts enrollees and other interested individuals, particularly educators.

A combination mailed questionnaire and telephone interview sheet was developed from which the information gathered was summarized, tabulated and reported. A cover or explanation letter and informed consent form was mailed along with the questionnaire to provide the respondent information about the study. The graduates who did not respond to the questionnaire within the allotted time were contacted by telephone and an interview was conducted.

Twenty-four former students who had completed the two year graphic arts program at the two vocational centers

were included in this study.' Eighteen of the students responded either by returning the questionnaire or by personal telephone interview, which represents a 75 percent return.

The major findings are as follows: 34 percent of the graduates were employed in areas related to their training and 21 percent were employed in areas outside their area of training; 100 percent of the respondents were residing in the immediate area; the overall average hourly wage (excluding overtime) was \$2.82 per hour, although the hourly wage for the graduates employed in the related areas was \$3.92 per hour; 100 percent indicated that they would recommend the graphic arts program to a friend; and the overall majority, 56 percent, felt that not enough time had been spent on preparation for employment. Other findings were explored and reported in detail in the preceding chapter and presented in the Conclusions.

II. CONCLUSIONS

Based upon a review of the data obtained from the twenty-four graduates, it is concluded that:

1. The majority of the graduates still reside in the community where training was received.
2. Over one-third of the graduates are employed in the area for which they trained.

3. The average hourly wage for those employed was \$2.82 per hour, excluding overtime.

4. The average hourly wage for those employed in the graphic arts or related areas was somewhat higher (\$3.92 per hour).

5. Twenty-two percent of the respondents had pursued post secondary or college training since graduation.

6. Over one-half of the respondents felt more class time should be devoted to employment preparation.

7. As a group, the majority felt the graphic arts programs were equal to or better than other academic or vocational courses taken.

8. The average number of jobs held by the respondents was 1.9 per student.

9. Less than one-half of the students are unemployed; however, the high unemployment rate can be attributed to the fact that most of the unemployed are still full-time students.

10. Over three-quarters of the graduates were males.

11. None of the reporting graduates had been in the military service.

III. RECOMMENDATIONS

The following recommendations are being made after reviewing all related materials and data from this study:

1. All present and future students should be made aware of the fact that upon graduation they will be asked to respond to a follow-up questionnaire periodically for the purpose of improving the program and assisting the program to better prepare the students for employment.

2. That the instructors maintain an up-to-date list of students' names and addresses.

3. The school should place more emphasis on the placement of graduates.

4. The present curriculum should be reviewed. A revision should be planned to incorporate more training in employability skills and additional time allotted for press operation.

5. The instructors invite area business leaders to address the classes and to indicate what they look for and expect when interviewing prospective employees.

6. That a future study be conducted to determine the effectiveness of the program at that date.

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BIBLIOGRAPHY

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APPENDICES

APPENDIX A

COVER LETTER

Dear Former Student:

As a graduate student in The University of Tennessee, Knoxville, I am conducting a follow-up study of the former graphic arts students of the Farragut/Byington-Solway Vocational High Schools. This study is to inform us about the training you received while enrolled in the graphic arts program and to learn if you have been able to effectively use the training that you received.

In order to make needed changes, we would like your help. Would you please complete the enclosed questionnaire and return in the self-addressed, stamped envelope? It will take about ten minutes of your time to answer all of the items so that improvements can be made for future students. All information received will be kept confidential, and you will not be identified in the report of the study.

I will appreciate your help. May we hear from you within the next two weeks?

Sincerely,

(Signed)

Richard L. Bowling
Graduate Student
The University of Tennessee, Knoxville
Department of Vocational-Technical
Education

Enclosures: Envelope
Questionnaire
Consent Form

APPENDIX B

FOLLOW-UP INFORMATION QUESTIONNAIRE

Code # _____

1. ANSWER ONLY IF EMPLOYED:

- a. Present job title or position_____.
- b. Are you employed in a graphic arts field? Yes__ No__
- c. If no, are you employed in a graphic arts related job? Yes__ No__
- d. Has your graphic arts training helped you find employment? Yes__ No__
- e. Which of the following best describes how your vocational training helped you prepare for your present job: Very well__ Quite well__
Not very well__ Not at all__
- f. How many jobs have you had since leaving high school?
1__ 2__ 3__ 4__ 5 or more__
- g. Were any of your previous jobs in the graphic arts or related industries? Yes__ No__
- h. What is your present approximate Hourly Wage excluding overtime?
\$2.00-2.49__ \$2.50-2.99__ \$3.00-3.49__
\$3.50-3.99__ \$4.00-4.49__ \$4.50-4.99__
\$5.00 or more__

2. ANSWER ONLY IF UNEMPLOYED:

- a. Have you been employed in the graphic arts field since leaving high school? Yes___ No___
- b. Have you been employed in a graphic arts related job since leaving high school? Yes___ No___
- c. If yes, to either of the above, how well did your vocational training prepare you for your job?
Very well___ Quite well___ Not very well___
Not at all___
- d. How many jobs have you had since leaving high school?
1___ 2___ 3___ 4___ 5 or more___

3. ANSWER ONLY IF IN THE MILITARY:

- a. Which branch of the armed services are you in?
Army___ Air Force___ Navy___ Marines___ Coast Guard___
Other (specify)_____
- b. To what extent has your graphic arts training helped your military occupation?
Very well___ Quite well___ Not very well___
Not at all___

4. EVERYONE PLEASE ANSWER THESE QUESTIONS:

- a. Would you recommend this graphic arts course to a friend of yours to take while in high school?
Yes___ No___
- b. How would you rate this course in comparison with other subjects in which you were enrolled in high school? Good___ Fair___ Poor___
- c. In which area(s) of the graphic arts program do you think that more time should be taken? Safety and Orientation___ Layout and Design___ Darkroom Technique___ Press Operation___ Preparation for Employment___ Other (explain)_____
- _____
- _____
- _____
- _____

d. Have you attended any school, college, or vocational training center since graduation? Yes__ No__

e. If yes, please indicate school_____

Location_____

Street

City

State

Zip

. Major course or field of study_____

f. Please feel free to comment about the value of the vocational graphic arts program course.

Thank you very much for your assistance in filling out this questionnaire.

APPENDIX C

INFORMED CONSENT FORM

Research Project: A follow-up study and program evaluation involving a comparison of the one and two year graphic arts programs of the Knox County School System.

Researcher: Richard L. Bowling
Graduate Student, The University of Tennessee,
Knoxville
Department of Vocational-Technical Education
Telephone: 524-7534 or Department 974-2574

You are invited to participate in a research study at The University of Tennessee, Knoxville. The purpose of this study is to determine if the graduates of the graphic arts courses offered in the Knox County School System are gainfully employed in the area for which they trained or in a related area. The information submitted by you will assist the future development of the graphic arts curriculum.

You are asked to provide the data requested in the enclosed questionnaire.

The information collected will be coded to assure confidentiality of the individual participants. No personal identification of any sort will appear in the written reports of the project.

I will be happy to answer any questions or inquiries you have concerning the project.

This certifies that the person signing this form has agreed to participate in this study of his/her own free will and is free to withdraw his/her consent and/or of his/her organization at any time without prejudice.

Signed: _____

Date: _____

APPENDIX D

STATEMENTS MADE ABOUT THE TRAINING BY THE GRADUATES

The last question on the questionnaire asked the graduates to respond as to the value of the training that each had received. The following are taken from responses received:

"If someone is interested in the graphic arts field, I feel this is a good program and is an inexpensive way to get job training."

"An excellent course. Mr. Stevens did an excellent job. I would recommend it to anyone."

"If you are interested in the graphic arts, any area, it would be a perfect course to take. It teaches all that is necessary to go into industry."

"I feel the course helped me a lot. My former employer was quite impressed with my training."

"The graphic arts class was of great value to me. It not only interested me in photography, but other areas as well."

"I think the program has a good instructor who is very capable of teaching in this area."

"I feel that the graphic arts programs in the Knox County Schools are very valuable, since they seem to be the only place that you can get instruction in this field."

"I think that it was a very good course and more people should get interested in it."

VITA

Richard Lee Bowling, son of Ralph R. and Frances O. (Chandler) Bowling, was born in Knoxville, Tennessee on May 19, 1948. He attended elementary and high school in the Knoxville City School System. In June of 1966 he was graduated from South High School at Knoxville, Tennessee. Upon graduation he attended The University of Tennessee, Knoxville, for a short while and then enlisted in the United States Army where he served four years as a member of the United States Army Criminal Investigation Division (CID). After being honorably discharged in 1971, he again attended The University of Tennessee, Knoxville, for a short while.

In the Fall of 1971, he began working in retail sales as a diamond and jewelry salesman. By 1973 he had worked his way to the position of vice president and general manager of a large jewelry and retail corporation. Being disillusioned with retail management, he began a career in graphic arts with Knox County Government. In the summer of 1977 he re-entered The University of Tennessee, Knoxville, and in March of 1979, he received his Bachelor of Science degree in Industrial Education. In March of 1980 he completed requirements for and received a Master of Science degree in Industrial Education from The University of Tennessee, Knoxville.

Also, he is a Past Master of Woodward Lodge #737, Free and Accepted Masons of Knoxville. Further he is a Private Pilot and Major in the Tennessee Wing Civil Air Patrol.

He is married to the former Ellen (Ellie) Elizabeth Sanders of Knoxville, Tennessee. They have one son-- Richard Tinsley (Dusty).