ABSTRACT

Johnson, Frances Nelson. A Five-Year Follow-up of Graduates of Asheville-Buncombe Technical Institute, 1966-67 through 1970-71.

During the period of February through May, 1972, the Appalachian Developing Institutions Consortium conducted a graduate follow-up. Nine hundred forty-one questionnaires were mailed to all students who had completed requirements for graduation during the 1967-71 period. A return of 691 or seventy-three percent of the questionnaires was achieved.

The information supplied to Asheville-Buncombe Technical Institute by the Consortium was for the entire graduate population. The report did not provide information in a form that could be used in the evaluation of individual curriculum offerings nor was it useful as an instrument for career counseling. It therefore became necessary that this information be so analyzed that the results would be of use in curriculum evaluation and career counseling.

The data were collected during a four months period, February through May, 1972, by the Appalachian Developing Institutions

Consortium and printed for use by the eight member schools.

The procedures for gathering the data were an original letter informing graduates that a follow-up would be mailed with a request urging cooperation in returning the completed questionnaire promptly; within two weeks the questionnaires were mailed. Additional follow-ups were needed for those who had not responded and they included two letters and two post cards mailed at two week intervals. Telephone calls were made to all graduates who had not responded to the initial

efforts to obtain completed questionnaires. All efforts resulted in a return of 691 questionnaires for a seventy-three percent response.

Results of the questionnaires indicated that from an economic point of view, 522 graduates were employed in the State with an additional 108 outside the State or in military service.

Well over seventy-five percent of the graduates were employed in the field for which they trained. Only six percent were unemployed.

The current weekly salary for degree graduates was \$172 and \$134 for vocational graduates. These salaries compare favorably with the salaries of graduates from other schools within the Community College System.

The average hours of employment while attending school were 24.64 a week for the degree students and 24.92 hours a week for the vocational students.

Ninety-five percent of the vocational students and eighty-nine percent of the degree graduates evaluated instruction as good to excellent. Faculty knowledge of subject taught was evaluated good to excellent by ninety-six percent of the degree graduates and by ninety-nine percent of the vocational graduates.

Ninety-nine percent of all graduates said they would recommend Asheville-Buncombe Technical Institute to their friends.

The study revealed some weak areas and some strong areas; however, it would appear that the strengths outweighed the weaknesses.



A FIVE YEAR FOLLOW-UP STUDY OF GRADUATES OF ASHEVILLE-BUNCOMBE TECHNICAL INSTITUTE 1966-67 THROUGH 1970-71

A Thesis

Presented to

the Faculty of the Graduate School

Appalachian State University

In Partial Fulfillment
of the Requirements of the Degree
Master of Arts in Education

by
Frances Nelson Johnson
April 1974

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Chapter 1

INTRODUCTION

In 1957 the North Carolina Legislature passed an enabling act creating a program of technical education through the formation of Industrial Education Centers. It was obvious that if North Carolina was to achieve a competitive position in the expanding industrial and technological era, well equipped training centers would be essential to prepare individuals to meet the needs of industry. After thorough surveys, both State and local, and a complete analysis of the needs and future trends of technical and industrial training, Asheville was selected as one of the twenty locations for Industrial Education Centers and was one of the original six established.

In 1963 the General Assembly enacted a law placing Industrial Education Centers under the direction of the newly created Department of Community Colleges. These Institutes were to be governed by a local board of trustees. Soon after the establishment of the local board of trustees a request was made to the Department of Community Colleges and the State Board of Education that the Asheville Industrial Education Center be converted to a technical institute with the power to award Associate in Applied Science degrees to the graduates of the business and engineering divisions in addition to the vocational diplomas. This request was approved by the State Board of Education in January, 1964, and the name of the center was changed to Asheville-Buncombe Technical Institute.

The Institute, aware that the most important evaluation of any institution was through the degree of success achieved by its graduates, engaged in graduate follow-ups starting with the first class graduated in 1962. However, only those items which would be of value in recruitment and career counseling were included. There was no attempt during previous years to evaluate the educational programs.

During the period of February through May, 1972, the Appalachian Developing Institutions Consortium conducted a graduate follow-up. Nine hundred forty-one questionnaires were mailed to all the students who had successfully completed requirements for graduation during the 1967-71 period. A return of 691 or seventy-three percent of the questionnaires was achieved.

The information supplied the Institute by the Consortium was for the entire graduate population. The report did not provide information in a form that could be used to evaluate the various educational programs. (Appendix A) The report gave an over-all picture of how well the Institute graduates were achieving.

THE PROBLEM

Statement of the Problem. The information, in the form supplied Asheville-Buncombe Technical Institute by the Appalachian Developing Institutions Consortium, was not useful in the evaluation of individual curriculum offerings nor was it useful as an instrument for career counseling. It therefore became necessary that this information be so analyzed that the results would be of use in curriculum evaluation and career counseling.

Purpose of the Study. The purpose of the study was to survey the graduates of Asheville-Buncombe Technical Institute with the primary objective being to provide the administration, board of trustees and department chairmen with an effective tool for evaluating the success of the various educational offerings; and to provide valid information for use by the counselors in career planning; for example: mean beginning and mean current salaries; geographic location of employment, availability of employment and type of on-the-job training necessary after graduation.

Secondary objectives were an attempt to find the answers to the questions:

Has Asheville-Buncombe Technical Institute justified its existence as far as Chapter 115A of the General Statutes of North Carolina was concerned?

Were there weak areas within the Institute? If so, what could be done to correct the situation?

Were there strong areas within the Institute? If so, how best to make use of them?

ASSUMPTIONS AND LIMITATIONS

ASSUMPTIONS

In light of information obtained from past follow-ups, it was assumed that the majority of the 1966-67 through 1970-71 graduates of Asheville-Buncombe Technical Institute would be gainfully employed within the field for which they trained and that a majority of them would have found employment in the local area or in other locations in the State.

It was further assumed that there would be weak instructional areas because of shifts in the labor market and other contributing factors beyond the immediate control of the Institute; that is, poor curriculum choice by entering students, lack of proper educational background for the program entered, misconceptions on the part of entering students as to what the curriculum involved, etc.

Further it was assumed, that if past follow-ups were accurate, the graduate body would be a loyal, interested group ready to assist the Institute in recruitment, and that their evaluations of department chairman and faculty instruction would be high.

LIMITATIONS

The data for the study were obtained from a follow-up conducted by the Appalachian Developing Institutions Consortium during the period February through May, 1972. Permission was not granted by the President to conduct a second follow-up with a questionnaire specifically designed to investigate, in depth, those areas of special significance to this study.

The information used in this study was taken from the questionnaires used in the Appalachian Developing Institutions Consortium followup. (Appendix B) The questionnaires included items that were not
applicable to this study and other items which did not cover the necessary depth. An example: the top current salary should have been
increased by one increment or a write-in figure over their top of \$400
a week salary should have been allowed. Ten graduates indicated they
were earning over \$400 a week, but no space or increment was available
to allow them to indicate how much over \$400 a week they were currently

earning. In computing the mean current salary it was necessary to use \$425 a week for the current salary. All other salary increments on the questionnaire were in \$50 increments. This figure could cause lack of valid mean current salary either upward or downward.

The question, "How important was your degree/diploma in obtaining your present position?" was ambiguous and probably resulted in lack of some valid responses. The question would have been more useful for this study had it been worded, "How important was your training at Asheville-Buncombe Technical Institute in obtaining your present employment?"

Question 4, "If you are employed outside your field of preparation, why?" was not used in this study even though it was a vital question and the results need exploration. The question did not allow sufficient alternatives and most of the responses were "other" which was not considered a valid reason.

Because Asheville-Buncombe Technical Institute is involved in education for immediate employment the section on additional educational experiences was not used. In another type study this information would have been quite valuable, but was not considered pertinent to this study.

The evaluation of Asheville-Buncombe Technical Institute's counseling service, department chairmen, and faculty was included in the section on additional educational experiences and could have been overlooked by those students who had not continued their education after graduation from the Institute.

All limitations considered, it was not believed that any single one or the entire group was sufficient to warrant any question as to the validity of the document.

DEFINITION OF TERMS USED

<u>Graduate</u>. A student who had successfully completed all requirements for graduation from the program of training.

 $\label{eq:total_programs} \begin{tabular}{ll} \hline $\operatorname{Technical\ Programs}.$ & A program of eighteen to twenty-four months duration in which classroom and theoretical instruction predominate. Courses in science, design and research were normally included in these programs. The technical programs led to a standard college degree. 1 \\ \end{tabular}$

 $\frac{\text{Vocational Programs.}}{\text{A program of nine to twelve months}}$ duration which had shop type experience as an integral part.} Theoretical instruction was included but these courses did not lead to a standard college degree. 2

<u>College Transfer or College Parallel</u>. General education courses of eighteen months duration. These courses led to a standard college degree.

Major Area. The area of a student's concentration. For example: electronics, drafting, chemistry, machine shop, tool and die making or welding.

 $^{^{1}\}mathrm{A}$ locally accepted definition. The definition was also accepted by the Veterans Administration.

 $^{^{2}\}text{A}$ locally accepted definition. The definition was also accepted by the Veterans Administration.

<u>Bachelor of Technology</u>. A special program established by Appalachian State University, whereby a graduate of a Technical Institute could be accepted as a junior.

Native Student. A university or college student who accomplished his first two years at the school he was currently attending.

Chapter 2

REVIEW OF THE LITERATURE

A thorough investigation of both ERIC and all related literature in the libraries of North Carolina State University at Raleigh, The University of North Carolina at Asheville, Appalachian State University and Asheville-Buncombe Technical Institute disclosed no published literature on graduate follow-ups for either vocational or technical students in North Carolina. The only available sources of data for this study were unpublished dissertations of college parallel follow-ups and individual institutional reports.

These findings were no surprise because of the lack of value for other than local evaluation and career planning. Such follow-ups tended to become obsolete within a very short time and were of value only to those schools which had produced them.

Mullen and Mechling conducted an analysis of the 1972 graduates of Northern Virginia Community College in two days, the day before (graduation) and graduation day, in June, 1972. The results were printed by the Office of Institutional Research as a "Staff Report." The researchers were quick to admit that because of the time of the survey the results could not be used except in a general sense.

Mullen and Mechling obtained approximately sixty percent return of 617 graduates. Thirty-eight percent of those responding indicated that they planned to enter full-time employment; continuing into full-time four year institutions were twenty-seven percent; twenty-nine

percent were planning to enter a four-year institution and continue to work part-time. The remainder planned to enter the armed service or for some reason had no definite plans. Of those who planned to enter employment fifty percent felt they were well prepared for their jobs; less than one percent felt they were ill prepared. Eight percent were planning to enter employment not related to their course work at the school, and seven percent were undecided.

Of those who were already working sixty percent were working in the field for which they had prepared at Northern Virginia Community College; thirty-one percent had received promotions and fifteen percent attributed it to their education. The mean starting salary for those employed was \$125 per week with the mean current salary \$152 per week; an increase of twenty-one percent during the period of their education.

Employment was obtained by the graduating students in the following manner: twenty-three percent were placed through the school; thirty-seven percent found employment themselves; while eleven percent of the students found employment through friends.

As is usually the case with graduates of Technical Institutes and Community Colleges, ninety-eight percent of the graduates replied that they would recommend Northern Virginia Community College to their family and friends. $^{\rm 1}$

A follow-up of Connecticut State Vocational-Technical Schools graduates of the class of 1963 indicated a total of 1,229 graduates with a return of 610 questionnaires. The average hourly salary was

¹J. Michael Mullen and Elizabeth Mechling, "Analysis of 1972 Graduates-Survey" (unpublished Staff Report, Office of Institutional Research, Northern Virginia Community College, 1973.)

\$3.53. Employed within the State were 479; outside the State 67, with 45 in the armed service. Of those employed 273 were employed in the field for which they trained while 130 were in related jobs and 115 were employed in jobs unrelated to their training.²

Little and Winfield reported a graduate follow-up of vocational, technical and adult education in Wisconsin. In 1965, questionnaires were sent to graduates for a total response of 1,517. Employed in the field for which they were trained were fifty-two percent, twenty-nine percent were in related fields and thirteen percent in unrelated jobs. Eighty-six percent of the responses indicated training was relevant to their employment. The report found that the mean salary for men was \$485 per month and \$325 per month for women.

The general findings were that the employment experiences of the graduates was good, training was generally related to occupation and that their income was slightly above the mean for persons in their age group.

Fifty percent of the men stated that the training received was necessary for their employment while thirty-five percent said that training was useful. Of the women who responded fifty-five percent said that training was necessary and thirty percent said it was useful.

The men were found to be less likely to work in a job for which they were trained. The men had work records of fifty-six percent in jobs for which they were trained; thirty-three percent in related jobs

^{2&}quot;A Follow-up Study of Connecticut State Vocational-Technical Schools, Graduates of Classes of 1958 and 1963, Final Report" (unpublished report, University Research Institute of Connecticut, Inc., Wallingford, 1969). ERIC 034 866.

and eleven percent in unrelated employment. The women's records showed that sixty-four percent were in jobs for which they were trained, twenty-eight percent in related jobs and only eight percent in unrelated work. Twenty-nine percent of the men rated general education as more valuable and sixty-one percent said job skills were of more value; among women twenty-two percent thought general education more important and sixty-eight percent rated job skills of more value. Eighty-nine percent of the men and ninety percent of the women reported that they would recommend the program of study from which they graduated. 3

Gillie did a study on quality of instruction and course relevancy for the Associate degree technicians for Penn State University. The population selected for the study were 6,200 graduates of the electronic and drafting programs from the years 1955 and 1969. A randomly selected sample of 2,098 was used for the study. Eleven percent of the questionnaires were undeliverable, fifty-three percent were returned during the original and three follow-up mailings, five percent were contacted by telephone.

The ratings to be used were: 1-excellent, 2-good, 3-fair, and 4-poor in the quality of instruction. Within the category of "need for training" ratings to be used were: 1-very much needed, 2-much needed, 3-some, and 4-not needed.

Table 1 presents a comparison of the mean scores given by the electronic and drafting graduates in these areas.

³J. Kenneth Little and Richard Winfield, "Vocational Technical and Adult Education" (unpublished report, Center of Studies in Vocational Technical Education, Wisconsin University, June, 1970). ERIC 050 276.

Table 1
Comparison of Mean Scores - Gillie Study

Subject	Quality of Electronics	f Instruction Drafting	Need for t Electronics	training Drafting
Mathematics	1.95	1.88	2.20	1.87
Physics	2.13	2.20	2.49	2.68
English	2.07	1.96	2.33	2.39
Social Science	2.51	2.45	3.16	3.16

Within the major area the mean of quality of instruction ranged from a high of 2.06 for "vacuum tubes" to a low of 2.84 for "microwave" for the electronic graduates. The drafting graduates ranged from 1.89 for "layout" to a 2.33 for "manufacturing processes."

Within the major area the mean of "need for training" ranged from 2.30 for "test equipment" to 3.59 for "microwave" in electronics and from 2.33 for "layout" to 3.55 for "kinematics" in drafting.⁴

In 1969 the Industrial Research and Extension Center of the College of Business Administration of the University of Arkansas undertook an evaluation of vocational training programs within the State. The 6,193 graduates of the 1963-67 period were sent questionnaires; 2,095 or thirty-four percent response was obtained. It was found that twenty-one percent of those responding were outside Arkansas, ninety-

Angelo C. Gillie, "Associate Degree Technicians' Judgment on Quality of Instruction and Course Relevancy" (unpublished report, Department of Vocational Education Penn State University, 1971). ERIC 054 347.

seven percent of those responding rated the instruction good to fair. Seventy-four percent were placed on jobs for which they were trained; eighty percent felt exceptionally well prepared for their jobs. The starting salary was \$1.50 per hour with the current salary \$1.77 per hour for an eighteen percent increase.⁵

In a graduate study done by Forsyth Technical Institute of the 1971-72 graduates, an unpublished and unprinted report of 393 graduates, 228 or fifty-eight percent of the questionnaires were returned.

Upon analysis it was found that of the 228 who responded, 190 or eighty-three percent were employed, with a mean weekly salary of \$127 for technical and business divisions and \$116 per week for vocational graduates.

Of the 279 vocational graduates, 117 or forty-two percent were employed in the field for which they trained. Forty-four of the 114 or thirty-eight percent of the technical and business graduates were working in the field of training.

The graduates who responded to the question of value of training found it useful in 201 or eighty-eight percent of the answers. 6

An unpublished graduate follow-up from Wilson County Technical Institute reported 256 graduates for the 1972 year with 138 responding to the questionnaire for a fifty-four percent return. Of the students who responded eleven percent planned to continue their education, forty-

⁵"Evaluation of Arkansas Vocational Training Programs in Relation to Economic Development" (unpublished report, Industrial Research and Extension Center, College of Business Administration, University of Arkansas, 1969). ERIC 039 327

⁶Papers on Graduate Follow-up of 1971-72 Graduates (unpublished papers, Forsyth Technical Institute, Research Department, Winston-Salem, North Carolina, 1973).

seven percent were employed in the field for which they were trained; seven percent were employed outside the field of training; four percent were unemployed and thirty percent had status unknown. The information received from Wilson County Technical Institute did not include data on salaries, job placement, evaluation of the programs or value of the training received.⁷

The registrar of Southeastern Community College furnished a follow-up of the 1972 Associate in Arts graduates. Of those who returned the questionnaire 132 or eighty-four percent were continuing their education, ten percent had accepted employment and seven percent had entered the armed forces or for some other reason were not in school or working. Student response indicated that sixty-seven percent felt well prepared to extremely well prepared while twenty-nine percent felt adequately prepared. Only one percent felt poorly prepared. There was no follow-up on the ten percent who entered employment.⁸

A comprehensive follow-up study was done in 1969 by DeVaughn of Gaston College. In the unpublished report the data were divided into the three divisions which constituted a comprehensive community college; College Parallel, Technical Division and Vocational Division.

The study was not a graduate follow-up, but a survey of the 2,379 students who had been enrolled during the 1966-67 school year. A response of 756 or thirty-two percent was achieved. The data indicated

^{7&}quot;Follow-up Survey of the 1971-72 Graduates" (unpublished report, Wilson County Technical Institute, Wilson, North Carolina, 1973).

^{8&}quot;Follow-up Survey of the 1971-72 Associate in Arts Graduates of Southeastern Community College" (unpublished report, Southeastern Community College, Whiteville, North Carolina, 1973).

that thirty-eight percent of those who responded were attending another school; fifty-one percent were employed full-time; five percent had returned to Gaston College; three percent were unemployed and ten percent were in the armed forces.

The data revealed that the number of responses to the question regarding present status totaled fifty-three more than the total response reported with a 107% response. It was assumed that there were dual answers to this question.

The largest return was achieved by the technical division with sixty-nine percent. Employment records indicated that eighty-five percent were employed full-time; six percent part-time; eight percent in school and two percent unemployed. The mean salary was \$559 per month. Of the students employed; forty-eight percent were in related fields and twenty-one percent were in unrelated employment. The majority, fifty-one percent, were employed within a radius of fifty miles from their home town.

In response to how education had helped, fifty percent reported that it had helped very much, fifty-one percent reported definite help while nine percent said no help at all. In answer to how employment was obtained, fifty-five percent were employed through the school placement service; eleven percent by friends, eleven percent by former employers, seven percent found employment on their own; and the remaining sixteen percent were assisted by relatives, employment agencies, technical journals, etc. In response to the question of "rating instruction" ninety-four percent found it adequate and six percent found it inadequate. The report indicated that of those who found it inadequate none had completed requirements for graduation.

In the vocational division 360 questionnaires were mailed with ninety-eight or twenty-seven percent return. The data indicated that only four percent were not employed full-time and of those, two percent were employed part-time, one percent was in school and one percent was seeking employment. The mean salary was \$490 per month for those employed. Of the students employed twenty-eight percent were in the field for which they trained; thirty-six percent in related fields; and thirty-six percent in unrelated fields.

In the area of obtaining first job, forty-seven percent found jobs through friends or relatives; nine percent were assisted by school placement; twelve percent had been helped by previous employers; fifteen percent used an employment agency and nine percent found jobs for themselves. The remaining eight percent used ads for finding jobs. The response to geographic location was so meager as to be insignificant with only six persons answering the question. 9

An unpublished report from Rowan Technical Institute for the 1971-72 school year reported all information in percentages with no indication of the number of graduates who were surveyed nor the number of responses.

The report showed a seventy-two percent return from the technical division. Of those seventy-six percent were employed, nine percent were unemployed. It was assumed that the remaining percentage was "no response" to the question. The employed students indicated that seventy-three percent were in the field for which they trained while

⁹Imogene S. DeVaughn, "Follow-up Study of Gaston College Students 1966-67" (unpublished report, Gaston College, Dallas, North Carolina, 1969).

fourteen percent were in unrelated fields. Schooling for sixty-eight percent was a factor in securing their employment and nineteen percent replied that it was of no assistance. Training was rated as satisfactory by ninety-two percent. The median beginning salary for those employed was between \$100 and \$129 per week, with current median salary between \$130 and \$159 per week.

The vocational division achieved a forty-three percent return. Of those eighty percent were employed in their field of training and ten percent were in unrelated employment. The training had been a factor in securing their job for sixty-nine percent of those who responded and had not helped nineteen percent. Training was rated as satisfactory by eighty-seven percent and as unsatisfactory by four percent. The median beginning salary for the vocational graduates was between \$70 and \$99 per week with current median between \$100 and \$129 per week. \$100

An excellent unpublished graduate follow-up from Technical Institute of Alamance for the years 1970, 1971 and 1972 was obtained and the data analyzed.

In the technical division there were 279 graduates to whom questionnaires were sent. There was a response from 183 for a sixty-six percent return. Graduates employed in the field for which they trained represented sixty-four percent with thirty-five percent in unrelated fields. The median weekly salary was between \$115 and \$145 per week.

The method used in obtaining first employment was: fifteen percent had school help; thirty-nine percent found employment themselves;

^{10&}quot;Graduate Follow-up 1971-72" (unpublished report, Rowan Technical Institute, Salisbury, North Carolina, 1973).

six percent used the services of an employment office, twenty-five percent had their job before graduation and eight percent were unemployed.

The remaining seven percent used various other methods for finding jobs.

In answer to the question, "how necessary was your training in obtaining your job?" twenty-nine percent replied that it had been required; thirty-eight percent said very helpful, sixteen percent said some help and eight percent reported no help at all.

Teaching in the major area was rated superior by seventeen percent, very good by fifty-seven percent, average by twenty-four percent and below average to poor by two percent.

In the vocational division 277 graduates were sent questionnaires with a return of 142 for fifty-one percent response. Graduates employed in the field for which they trained represented sixty-five percent with a median salary of \$100 to \$115 per week.

To obtain their first job; fifteen percent used school help; sixty-four percent found employment for themselves; fifteen percent were employed before graduation and six percent were unemployed.

The training received was required for employment by forty-four percent of the vocational graduates, very helpful for twenty-nine percent; some help for seven percent and no help at all for nine percent. The remaining eleven percent responded that the question was not applicable.

To retain their present employment thirty-seven percent replied that they could not do the job without the training received; thirty-four percent found the training very helpful; and eleven percent said that it was no help at all.

The vocational division evaluated teaching in their major area as: twelve percent superior; fifty-eight percent very good; twenty-nine percent average and only one percent as below average. 11

From the institutional reports reviewed it would appear that the Technical Institutes in North Carolina were performing the task for which they were established.

Chapter 115A, General Statutes of North Carolina, Article 1, section 1 gave a statement of purpose for the institutions:

... The major purpose of each and every institution operating under the provisions of this chapter, shall be and shall continue to be the offering of vocational and technical education and training, and of basic, high school level, academic education needed in order to profit from vocational and technical education, for students who are high school graduates or who are beyond the compulsory age limit for the public school system and who have left the public school.

The law seemed quite clear that the basic purpose of all institutes within the Community College system was to provide vocational and technical education to those students who wished to enter the labor force immediately upon graduation. The regrettable fact has been that the only valid research done within the State has been graduate follow-ups on college transfer students. No documented evidence was available to determine if the institutions were really carrying out not only the intent but the letter of the law that established the system.

The only documented reports for the North Carolina Community

College system are on file as Doctors' dissertations in the library of

^{11&}quot;Follow-up Study Vocational-Technical Graduates - 1970, 1971
and 1972." (unpublished report, Technical Institute of Alamance,
Burlington, North Carolina, 1973).

¹²North Carolina, <u>Public School Law of North Carolina</u>. (1972)

North Carolina State University at Raleigh and are follow-ups of college parallel graduates.

Stirewalt $(1971)^{13}$, Eckard $(1971)^{14}$, Taylor $(1972)^{15}$, and Henderson $(1972)^{16}$ completed excellent follow-up studies of the college transfer student in individual publically supported State Universities.

In each of the reports it was found that transfer students had been adequately trained to be able to compete with the native students in the particular university. It was determined in each study that "transfer shock" had occurred to some degree, from mild at one of the universities to severe at another, during the first quarter after transfer to the four year institution. However, before completion, students who persisted were able to catch up and graduate with no significant difference in grade point average.

¹³Maurice Ray Stirewalt, "Academic Success of North Carolina Community College Transfer Students at the University of North Carolina at Charlotte" (unpublished Doctor's dissertation, North Carolina State University at Raleigh, 1971).

¹⁴Miles Lafayette Eckard, "A Comparative Study of the Academic Characteristics and Success Patterns of North Carolina Community College Transfer Students and Native Students at Appalachian State University" (unpublished Doctor's dissertation, North Carolina State University at Raleigh, 1971).

¹⁵Phillip Wynne Taylor, "An Analysis of Selected Factors Associated with the Achievement of Transfer Students from Twelve North Carolina Community Colleges with those of Regularly Enrolled Four-year Students at East Carolina University" (unpublished Doctor's dissertation, North Carolina State University at Raleigh, 1972).

¹⁶James Leroy Henderson, Jr., "An Analysis of the Academic Success of Community College Transfer Students as Contrasted to Native Students in Four North Carolina Publicly Supported Universities" (unpublished Doctor's dissertation, North Carolina State University at Raleigh, 1972).

Henderson gave the best basic reason for conducting such followups when he stated:

Henderson also found that:

. . . . It should be noted that transfers did not perform as well as natives in either of the four institutions. . . 18

This statement was not intended to mean that the college parallel student could not be successful at the university level. The implication was simply that they did not do as well as far as grade point averages were concerned until their senior year. In each study it was found that there was no significant difference between transfer and native students by the senior year and at graduation.

It therefore seems reasonable to assume that the four investigations into the college transfer level have made their point. Most Community Colleges were preparing their college transfer students adequately for the four year universities.

An analysis of the follow-ups received from other Institutes within the North Carolina Community College system revealed that the return from their surveys ranged from thirty-two to seventy-two percent. The mean weekly salary for technical graduates was \$133 and for vocational graduates \$113. Seventy-six percent of the graduates who responded to their respective schools were in the field for which they trained or in related fields. Eighty-one percent of all students employed said their training was helpful.

¹⁷Ibid., p. 11.

It would appear that from the sample reviewed the schools were doing an adequate job of training individuals for employment in business and industry; or furnishing an adequate background for further education.

Chapter 3

DESIGN OF THE STUDY

The study was designed to utilize the questionnaire used in a graduate follow-up conducted by the Appalachian Developing Institutions Consortium during the period February through May, 1972.

The information obtained from the returned questionnaires was to be presented, for each instructional area, in terms of: employment; geographic location of employment; mean beginning and mean current salary; further on-the-job training necessary for present employment; value of degree/diploma in obtaining present position; methods of obtaining first employment after graduation; average hours employed while in school; evaluation of counseling service, department chairman, instruction by the faculty and the faculty knowledge of subject taught; and an overall evaluation of the Institute as reflected by the graduates being willing to recommend the Institute to their friends.

The procedure would enable administration, board of trustees, department chairman and counselors to evaluate programs in line with the purpose of the study - the success of the programs as reflected by the success of the graduates.

Source of Data. The data were the results of individual questionnaires mailed to the 941 graduates of Asheville-Buncombe Technical Institute for the period 1967-71.

Procedures Used in Collecting the Data. The data were collected during a four month period, February through May, 1972, by the

Appalachian Developing Institutions Consortium and printed for use by the eight member schools.

The procedures for gathering the data included an original letter informing graduates that a follow-up would be mailed with a request urging cooperation in returning the completed questionnaire promptly. Within two weeks the questionnaires were mailed. A thirty-five percent return was achieved. The return was not considered sufficient for a summary of data; therefore, two letters and two post cards were mailed to those who had not responded. These follow-ups were spaced at two-week intervals. Telephone calls were made to all graduates who had not responded to the initial efforts to obtain completed questionnaires. All efforts resulted in a return of 691 questionnaires for a seventy-four percent response.

This percentage was accepted as adequate, considering the length of time some of the graduates had been away from the school, and was used to produce an institutional follow-up.

Methods of Gathering Data. As completed questionnaires were received they were coded, in the space provided on each of the forms, for ease in key-punching. An accurate record of responses was maintained for further follow-up of those who had not yet responded.

The completed forms were retained by the Institute's Research Coordinator until the end of the survey at which time they were sorted by instructional area and sent to the computer center at Appalachian State University for key-punching.

When all returned questionnaires had been transferred to computer cards they were processed on the computer for the institutional report.

Description of Data Gathering Instrument. The questionnaire (Appendix B) was a four-page single-fold document, printed in very small type. The questionnaire contained personal information, employment information, additional educational experience information and evaluation of counseling, department chairman, instruction and faculty knowledge of subject.

Four eighty column data cards were required for each completed questionnaire. Card one contained personal information which was not available for this survey. The request was made of the Research Coordinator that graduates not be identified by name. As a precaution each of the cards contained a "case number" in columns one through four for security in the event the cards were accidentally mixed.

Card two contained a combination of personal and employment information. This was the first card used in this survey.

Card three contained employment information plus the beginning of the questions involved in the survey.

Card four contained results of additional educational experience, evaluation of counseling, department chairman, instruction, faculty knowledge of subject and general evaluation of the Institution.

The data used in this study were obtained from the Institute's Research Coordinator in the above card form. These cards were used to print information, in a coded form, which was then decoded, compiled, and arranged to provide additional information valid for the evaluation of individual programs and career counseling.

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Chapter 4

PRESENTATION OF DATA

As with all surveys, it was found that not all graduates answered all questions. The percentages reported were based only on the responses received. On all questions sufficient data were received to have valid conclusions.

Asheville-Buncombe Technical Institute graduated 941 students between 1966-67 and 1970-71. The graduates represented twenty curriculum programs; eleven in the degree granting divisions and nine in the diploma programs.

The 691 responses to the questionnaire ranged from fifty percent in a vocational area to ninety-four percent in two degree granting programs. The vocational response for 530 graduates was sixty-seven percent. The degree response for 411 graduates was eighty-two percent. The total institutional response was seventy-three percent.

Attention should be called to the fact that in four of the degree programs and in one of the vocational programs the graduates did not represent five years. The civil engineering technology curriculum did not graduate its first class until 1968, representing only four years. Both culinary technology and industrial engineering technology graduated the first class in 1970, thereby representing only two years of graduates. The hotel-restaurant management program graduated its first class in 1969 representing only three years of graduates. In the vocational division the medical laboratory assistant program graduated

its first class in 1971, therefore this survey covers graduates of only one year in this program.

INSTITUTIONAL RESPONSE - OVERVIEW

An analysis of data received from the Appalachian Developing Institutions Consortium revealed the following data for the graduate body:

Ninety-two percent were employed; seven percent unemployed and one percent continuing their education. The ones continuing their education were current students in tool and die making as graduates of machine shop curriculum.

Of those employed, seventy-one percent were in the field for which they trained; ten percent in related fields; fifteen percent in unrelated fields and four percent in military service, with employment unknown. The mean beginning salary in their present position was \$110 per week, with the mean current salary of \$144 per week, a thirty-four percent increase.

Seventy-six percent of the graduates were employed within the local area comprised of Buncombe, Haywood and Henderson counties; seven percent were out of the local area, but within the State; twelve percent were out of the State and five percent were in the military service, location unknown.

Thirty-two percent of the graduates were employed on their current jobs before graduation. The remaining graduates found employment in the following manner: nineteen percent with school help; thirty-four percent found employment themselves; the remaining fifteen percent either entered the military service, used an employment agency or relied on other means of finding employment.

In response to the question, "How necessary was your degree or dilopma in obtaining your present position?" the responses were: thirty-three percent answered required; twenty-seven percent said very necessary; thirty-one percent reported helpful and nine percent replied no help at all.

The types of additional on-the-job training reported on the questionnaires were: apprenticeship training forty-five percent; management training eleven percent; supervisory training ten percent and specialized training thirty-four percent.

The average hours of employment while attending school were: less than ten hours a week twenty-nine percent; ten to nineteen hours a week eleven percent; twenty to twenty-nine hours a week eighteen percent; thirty to thirty-nine hours a week eleven percent and forty hours a week or more thirty-one percent. The mean hours worked was 24.64.

Forty-four percent of the graduates used the services of the counseling staff after the first quarter and ninety-two percent found the quality of counseling well-directed and helpful.

Ninety-four percent found their department chairman helpful.

The quality of faculty teaching was rated excellent by forty-three percent; good by fifty percent and fair by seven percent. Knowledge of subject was rated excellent by sixty-three percent; good by thirty-five percent and fair by two percent.

Ninety-nine percent of the graduates said they would recommend Asheville-Buncombe Technical Institute to their friends.

DATA FROM ASSOCIATE IN APPLIED SCIENCE DEGREE GRADUATES

OVERVIEW

The instructional areas represented within this presentation were Engineering Division, Business Division and Hospitality Division.

Questionnaires were mailed to 411 graduates with a response of 336 or eighty-two percent. An analysis of the data revealed that ninety-three percent were employed. Of those seventy-two percent were in the field for which they trained; fourteen percent in related fields and fourteen percent were in unrelated jobs or military service with employment unknown.

Sixty-eight percent were employed in the local area; eight percent outside the local area but within the State; eighteen percent were employed outside the State and six percent were in military service.

The mean beginning salary in their present position was \$122 per week. The current mean salary was \$174 per week for a forty-three percent increase.

An equal number, thirty-four percent, were employed in their present job before graduation or found it themselves upon completion of training; twenty-three percent had school help while nine percent used the services of an employment agency.

In response to, "How necessary was your degree in obtaining your present position?" twenty-six percent reported required; thirty-six percent said very necessary, thirty-two percent responded helpful and six percent said no help at all.

For the forty-nine graduates who were involved in further on-thejob training, twelve percent were in apprenticeship training; twenty-two percent were in management training; twelve percent in supervisory training and fifty-three percent in specialized training.

The average hours of employment while attending school were: thirty-three percent worked less than ten hours a week; ten percent between ten and nineteen hours a week; nineteen percent between twenty and twenty-nine hours a week; eleven percent between thirty and thirty-nine hours a week and twenty-seven percent over forty hours a week. The mean for the Associate degree graduates was 24.33 hours per week.

Only forty-eight percent of the graduates used the services of the counseling staff after the first quarter; however, 193 of 211 responding, ninety-one percent rated the quality of counseling as welldirected and helpful.

Ninety percent of those responding found their department chairman helpful. The quality of faculty instruction was rated: excellent by thirty-one percent; good by fifty-eight percent; fair by ten percent and poor by one percent. Knowledge of subject was rated excellent by fifty-two percent; good by forty-four percent and fair by four percent.

Ninety-eight percent said they would recommend Asheville-Buncombe Technical Institute to their friends.

Presentation of Institutional data and overview of the degree granting division was of interest and was helpful information; however, the purpose of the study was for the evaluation of individual educational offerings and as an aid to counselors in career planning. To accomplish these objectives a report in more depth was needed.

PRESENTATION OF DATA BY CURRICULUM

In order to meet the objectives of this study, the evaluation of individual educational offerings and an aid to counselors in career planning, the data from the survey needed to be further reduced to the curriculum level. This section accomplished the task. Tables for a comparison of graduate response begin on page forty-nine for the Associate degree programs and on page seventy-four for the Vocational programs.

Business Administration

The business administration curriculum had sixty graduates from 1967 through 1971. The response to the survey was fifty-six for a ninety-three percent return.

The data received indicated forty-nine graduates were employed. Thirty-two were working in the field for which they trained; five were in related areas and twelve in unrelated areas. (See Table 2)

The geographic location of the graduates was: thirty six were in the local area; three were out of the local area but within the State; eight were out of the State and two were in military service. (See Table 3)

The mean beginning salary was \$113 per week with a current mean salary of \$147 per week for a thirty percent increase. (See Table 4)

Of the nine graduates who were involved in on-the-job training, one was in apprenticeship training, six in management training, one was in supervisory training and one was in specialized training.

In answer to the question, "How necessary was your degree in obtaining your present position?" the responses were: seven said that

the degree was required; ten reported that the degree was very necessary; twenty answered that it was helpful and three reported that the degree was no help at all. (See Table 5)

The means used in obtaining the first job after graduation were: fifteen had employment before graduation; five had school help; eight used an employment agency; seventeen found employment themselves; four used various other means; and two went into military service. (See Table 6)

The average hours of employment while attending school were: fourteen worked less than ten hours per week; six were employed from ten to nineteen hours a week; ten reported employment from twenty to twenty-nine hours a week; eight said thirty to thirty-nine hours a week and eight worked forty or more hours per week. The mean number of hours worked while in school was 24.33. (See Table 7)

Twenty-four of the graduates reported they had used counseling service after the first quarter and thirty-two said that counseling given was well-directed and helpful.

Forty graduates who replied to the question evaluated their department chairman as helpful. (See Table 8)

The evaluation of faculty teaching was: seven rated teaching as excellent; thirty-one said that teaching was good; twelve replied fair and one answered that teaching was poor. (See Table 9)

In the area of faculty knowledge of subject the ratings were: thirteen evaluated knowledge as excellent, three responded that knowledge was good and seven said that knowledge was fair. (See Table 10)

Of the fifty-three who responded ninety-six percent said they would recommend Asheville-Buncombe Technical Institute to their friends.

Chemical Engineering Technology

The chemical engineering technology curriculum had sixteen graduates within the period 1967 through 1971. The response to the survey was fifteen for a ninety-four percent return. The data received indicated one hundred percent employment. Ten were in the field for which they trained; one in a related field; two in unrelated employment and two in military service. (See Table 2)

Six of the graduates were in the local area and seven were out of the State. The remaining were in military service. (See Table 3)

The mean beginning salary was \$150 per week with a current mean salary of \$214 per week for a forty-three percent increase. (See Table 4)

There were only five graduates involved in on-the-job training; one was in an apprenticeship program and four were in specialized training.

In answer to the question, "How necessary was your degree in obtaining your present position?" the responses were: required by three; very necessary by six; helpful by four and not helpful at all from one. (See Table 5)

The methods used for obtaining first employment after graduation were: had employment before graduation three; two had school help in finding employment; six found their jobs themselves and two went into military service. (See Table 6)

The average hours of employment per week while attending school were: less than ten hours a week for seven; three worked from ten to nineteen hours; four were employed from twenty to twenty-nine hours a week and one worked between thirty and thirty nine hours a week. The mean hours employed while attending school was 14.33. (See Table 7)

Six of the graduates said they had used counseling services after the first quarter and eight reported the quality of counseling as welldirected and helpful.

Twelve of thirteen responding said their department chairman was helpful. (See Table 8)

The evaluation of faculty teaching was: six answered excellent; five said good and two reported that teaching was fair. (See Table 9) Faculty knowledge of subject was rated as excellent by five and good by nine. (See Table 10)

Fourteen who responded to the question said they would recommend Asheville-Buncombe Technical Institute to their friends.

Civil Engineering Technology

The civil engineering technology curriculum had sixteen graduates within four of the five years represented by the survey. The first class graduated in 1968. The response to the survey was fifteen for a ninety-four percent return.

One hundred percent of those responding were employed. Eleven were in the field for which they trained; two were in related fields and two were in military service. (See Table 2)

The majority, nine, were in the local area with an additional three outside the local area but within the State. Two were in military service. (See Table 3)

The mean beginning salary for those who responded was \$150 per week with current mean salary of \$179 per week for a nineteen percent increase. (See Table 4)

Only three of the graduates were involved in on-the-job training; one was in supervisory training and two were in specialized training.

In response to, "How necessary was your degree in obtaining your present position?" seven replied that it had been required; four said that it had been very necessary and three said it had been helpful.

(See Table 5)

The first job after graduation was obtained by the following methods: three had employment before graduation; five had school help in obtaining their jobs; and five found employment for themselves. Two had entered military service. (See Table 6)

The graduates reported that three worked less than ten hours per week while attending school; seven had worked twenty to twenty-nine hours per week; two worked thirty to thirty-nine hours a week and two were employed over forty hours per week. The mean hours employed while in school was 24.25. (See Table 7)

Four of those responding said they had used the counseling service after the first quarter and five rated the counseling service as well-directed and helpful.

The department chairman was rated as helpful by the thirteen who responded to the question. (See Table 8)

The quality of faculty instruction was rated excellent by five; good by six and fair by one. (See Table 9) Faculty knowledge of subject was rated excellent by nine and good by four. (See Table 10)

One hundred percent stated that they would recommend Asheville-Buncombe Technical Institute to their friends.

Culinary Technology

The culinary technology curriculum is one of the newer instructional offerings. The program had graduated six students in two years since the first graduation in 1970. The survey response was five for an eighty-three percent return.

All graduates who responded were employed. Four were in the field for which they trained; one was in an unrelated field. (See Table 2)

Three graduates were in the local area and two were out of the State. (See Table 3)

The mean beginning salary was \$165 per week with a current mean salary of \$215 per week. An increase of thirty percent was achieved in two years. (See Table 4)

Only one graduate was in any type of on-the-job training and was in an apprenticeship program.

Two of those who responded said their degree was very necessary and two replied that it was helpful. (See Table 5)

Three of the graduates were employed in their present position before graduation and two had school help. (See Table 6)

Four of the graduates were employed ten to nineteen hours per week while in school and one had worked twenty to twenty-nine hours per week. The mean for this group was seventeen hours per week employed while attending school. (See Table 7)

Only two of those who responded said they had used the counseling service after the first quarter; however, three evaluated the counseling as well-directed and helpful.

All who responded indicated that their department chairman was helpful. (See Table 8)

The quality of faculty instruction was rated excellent by one and good by three. (See Table 9) Faculty knowledge of subject was rated excellent by three and good by one. (See Table 10)

One hundred percent of those responding said they would recommend Asheville-Buncombe Technical Institute to their friends.

Data Processing

The data processing curriculum had eighty-three graduates in the five years covered by the survey. The response from the graduates was sixty-six for an eighty percent return.

Fifty-eight of those responding were employed. Twenty-four were in the field for which they trained; sixteen were in related fields; fourteen were in unrelated employment and four were in military service. (See Table 2)

The geographic location of the graduates was: thirty were in the local area; nine were outside the local area but within the State; fifteen were out of the State and four were in military service.

(See Table 3)

The mean beginning salary was \$105 per week with a mean current salary of \$147 per week for a forty percent increase. (See Table 4)

Eight were involved in on-the-job training; one was in management training, one in supervisory training and six in specialized training.

In response to the question, "How necessary was your degree in obtaining your present position?" eight reported the degree was

required; nineteen said the degree was very necessary; twenty-two replied that the degree was helpful and eight said that it had been no help at all. (See Table 5)

Fourteen of those who responded had their jobs before graduation; five had school help in finding employment; eight used the services of an employment agency; twenty-two found their jobs themselves; four went into military service and two used some other method of finding jobs. (See Table 6)

The average hours employed while in school were reported as less than ten by twenty-six of the graduates; three had worked ten to nineteen hours per week; fourteen were employed twenty to twenty-nine hours per week; six had worked thirty to thirty-nine hours per week and fourteen had been employed over forty hours per week. The mean hours of employment for the group were 16.42 per week. (See Table 7)

Of those who responded thirty-one reported they had used the services of the counseling staff after the first quarter and thirty-nine evaluated counseling as well-directed and helpful.

Forty-four rated the department chairman as helpful. (See Table 8)

The quality of teaching was rated as excellent by eighteen; good by thirty-seven and fair by seven. (See Table 9) Knowledge of subject was rated as excellent by thirty-four; good by twenty-six and fair by two. (See Table 10)

Ninety-eight percent of the graduates would recommend Asheville-Buncombe Technical Institute to their friends. Drafting and Design Technology

The drafting and design technology curriculum had sixty graduates during the period covered by the survey. There was a return of forty-four questionnaires for a seventy-three percent response.

Of the graduates who responded forty-one were employed. Twenty-nine were in the field for which they trained; three were in related employment; six were in unrelated jobs and three were in military service. (See Table 2)

The geographic location of those employed were: twenty-seven in the local area; three ourside the local area but within the State; seven outside the State and three in military service. (See Table 3)

The mean beginning salary was \$110 per week with a current mean salary of \$160 per week for a forty-five percent increase. (See Table 4)

Six of those who answered the survey were involved in on-the-job training; two were in management training and four were in specialized training.

Twelve of the graduates found their degree required for present employment; thirteen said their degree was very necessary; eleven replied that it was helpful and two reported that it was no help at all. (See Table 5)

Methods used in obtaining first job after graduation were: nineteen had their jobs before graduation; seven had school help in obtaining employment; one used the service of an employment agency to find work; eleven found employment for themselves and three went into military service. (See Table 6)

Nine of the graduates who responded worked less than ten hours a week while in school; three were employed from ten to nineteen hours

a week; eight worked twenty to twenty-nine hours a week; seven worked thirty to thirty-nine hours a week and sixteen were employed over forty hours per week. The mean hours worked while in school was 27.33. (See Table 7)

Twenty of the forty-one who responded said they had used the services of the counseling staff after the first quarter and twenty-nine of thirty said that the counseling was well-directed and helpful.

Twenty-nine of thirty-five rated their department chairman as helpful. (See Table 8)

In the evaluation of faculty, the quality of teaching was rated excellent by five; good by thirty-three and fair by four. (See Table 9) Faculty knowledge of subject was rated excellent by seventeen; good by twenty-four and fair by one. (See Table 10)

All who responded said that they would recommend Asheville-Buncombe Technical Institute to their friends.

Electronic Technology

The electronic technology curriculum had fifty-five graduates during the period covered by the survey. The response was forty-two for a seventy-five percent return.

Forty-one of those responding were employed and one was furthering his education.

Thirty were in the field for which they trained (two teaching); six were in related jobs and five were in unrelated employment. (See Table 2)

Twenty-two were in the local area; seven were out of the local area but within the State; eight were out of the State and five were in military service. (See Table 3)

The mean beginning salary was \$122 per week with current mean salary \$178 for a forty-six percent increase. (See Table 4)

Eleven of those who responded were involved in on-the-job training. One was in apprenticeship; one was in management training; two were in supervisory training and seven were in specialized training.

Fourteen found their degree required in obtaining present employment; twelve said the degree was very necessary; eight reported that it had been helpful and two said that it had been no help at all. (See Table 5)

The graduates who responded found employment by the following methods: seventeen were employed in their jobs before graduation; ten were employed with school help; one used the services of an employment agency; eight found jobs themselves and five went into military service. (See Table 6)

The average hours of employment while attending school were: ten worked less than ten hours per week; two worked from ten to nineteen hours per week; three were employed from twenty to twenty-nine hours a week; two were employed thirty to thirty-nine hours a week and twenty-four worked forty or more hours a week. The mean hours of employment while in school was 28.9 per week. (See Table 7)

Seventeen of forty who responded said they used the counseling service after the first quarter and twenty-four of twenty-eight reported that the quality of counseling was well-directed and helpful.

Thirty-eight graduates evaluated their department chairman as helpful. (See Table 8)

In evaluation of quality of faculty teaching; twenty-one responded that it was excellent and nineteen replied good. (See Table 9)

Knowledge of the subject was rated excellent by thirty-three and good by seven. (See Table 10)

Forty of the forty-one who responded said they would recommend Asheville-Buncombe Technical Institute to their friends.

Hotel-Restaurant Management

The hotel-restaurant management curriculum had twenty graduates in three years covered by the survey. The first graduation was in 1969. The response to the survey was eleven for a fifty-five percent return.

Of the eleven who responded to the questionnaire, nine were employed, all of them within the field for which they trained. (See Table 2)

Four of the graduates were in the local area and five were out of the State. (See Table 3)

The mean beginning salary was \$150 per week with a current mean salary of \$181 per week for a twenty-one percent increase in three years. (See Table 4)

Two of those who responded were involved in on-the-job training and both were in management training.

In response to the question, "How necessary was your degree in obtaining your present position?" two said that it had been required; three answered that it had been very necessary; three said that it had been helpful and one said that it had been no help at all. (See Table 5)

Employment was obtained by the following methods; three had their jobs before graduation; four had school help in obtaining jobs and four found employment for themselves. (See Table 6)

Three of the graduates reported that they had been employed for ten hours or less while in school; two said they had worked ten to nineteen hours a week; two said twenty to twenty-nine hours a week; one replied thirty to thirty-nine hours a week and three were employed forty or more hours a week. The mean hours worked while attending school was 22.73. (See Table 7)

Ten of the eleven who responded said they had used the counseling service after the first quarter and eight evaluated the service as well-directed and helpful.

Eight of ten said that their department chairman was helpful (See Table 8)

In faculty evaluation the quality of teaching was rated excellent by three; good by five; fair by one and poor by one. (See Table 9) The evaluation of knowledge of subject was rated excellent by six and good by four. (See Table 10)

All eleven said they would recommend Asheville-Buncombe Technical Institute to their friends.

Industrial Engineering Technology

The industrial engineering technology curriculum had eight graduates in two years covered by the survey. The first class graduated in 1970. The response to the survey was seven for an eighty-eight percent return.

All seven of the graduates were employed in the field for which they trained. (See Table 2)

Six of those employed were in the local area and one was outside the local area but within the State. (See Table 3)

The mean beginning salary was \$146 per week with a current mean salary of \$196 per week for a thirty-four percent increase in two years. (See Table 4)

Two of the graduates were involved in on-the-job training, one was in management training and one was in supervisory training.

In response to, "How necessary was your degree in obtaining your present position?" two found their degree required; three replied the degree was very necessary and two found the degree helpful. (See Table 5)

Methods used to obtain employment were: three were employed before graduation; one had school help in finding work; one used the services of an employment agency and two found jobs themselves. (See Table 6)

The number of hours employed while in school were reported as: one worked twenty to twenty-nine hours a week and six worked forty or more hours a week. The mean hours employed while in school was 37.5. (See Table 7)

Only two of the graduates had used the counseling service after the first quarter; however, four said that counseling was well-directed and helpful.

Four of six rated their department chairman as helpful. (See Table 8)

The graduates evaluated the quality of faculty teaching as:
excellent by one; good by four and fair by one. (See Table 9)
Faculty knowledge of subject was rated excellent by two; good by three and fair by one. (See Table 10)

Six of the seven who responded said they would recommend Asheville-Buncombe Technical Institute to their friends.

Mechanical Engineering Technology

The mechanical engineering technology curriculum had twentythree graduates in the period covered by the survey. The response to the questionnaire was seventeen for a seventy-four percent return.

All seventeen were employed with eleven in the field for which they trained; five were in related employment and one was in military service. (See Table 2)

Fifteen of those employed were in the local area; one was out of the State and one was in military service. (See Table 3)

The mean beginning salary was \$118 per week with a current mean salary of \$165 per week for a forty percent increase. (See Table 4)

Three of the graduates were involved in on-the-job training.

Two were in apprenticeship training and one was in specialized training.

The degree was required in order to obtain the present position for seven, very necessary for six and helpful for four. (See Table 5)

Seven of the graduates were employed before they completed requirements for graduation; four found employment with school help; five found jobs for themselves and one went into military service.

(See Table 6)

Five of those responding worked less than ten hours per week while in school; one worked twenty to twenty-nine hours a week; three were employed from thirty to thirty-nine hours a week and eight

worked forty or more hours a week. The mean hours worked while in school was 27.94. (See Table 7)

Seven of sixteen said they had used the counseling service after the first quarter and eight of ten evaluated the counseling as welldirected and helpful.

Twelve of fifteen reported that the department chairman was helpful. (See Table 8)

The faculty evaluation of quality of teaching was rated excellent by three; good by ten and fair by three. (See Table 9) Knowledge of subject was rated as excellent by six; good by nine and fair by one. (See Table 10)

Sixteen of seventeen said they would recommend Asheville-Buncombe Technical Institute to their friends.

Secretarial Science

The secretarial science curriculum had sixty-four graduates during the period covered by the survey. The response to the questionnaire was fifty-eight for a ninety-one percent return.

Fifty-four of those who responded were employed with forty-five in the field for which they trained; six were in related employment and three were in unrelated areas. (See Table 2)

Forty-nine of those employed were in the local area; one was out of the local area but within the State and four were outside the State. (See Table 3)

The mean beginning salary was \$84 per week with a current mean salary of \$105 per week for a twenty-five percent increase. (See Table 4)

Only one of the graduates was involved in on-the-job training; she was in specialized training.

Thirteen of the graduates found that their degree was required in order to obtain their present position; twenty-six reported that the degree was very necessary and fourteen said it was helpful. (See Table 5)

The following methods were used to obtain the first jobs after graduation: ten were employed before graduation; twenty-three had school help in finding employment; five used the services of an employment agency; sixteen found employment for themselves and three used other methods. (See Table 6)

In response to the number of hours worked while in school, twenty-eight had been employed less than ten hours per week; ten had worked ten to nineteen hours per week; nine worked twenty to twenty-nine hours per week and seven reported they had been employed thirty to thirty-nine hours per week. The mean hours employed while in school was 14.7. (See Table 7)

Twenty-seven of the thirty-five who responded said they had used the counseling service after the first quarter. Thirty-three of thirty-six evaluated the counseling as well-directed and helpful.

Fifty-two responded that the department chairman was helpful. (See Table 8)

Faculty quality of teaching was rated as excellent by twenty-six; good by twenty-seven and fair by one. (See Table 9) Faculty knowledge of subject was rated as excellent by thirty-five and good by nineteen. (See Table 10)

All fifty-eight said they would recommend Asheville-Buncombe Technical Institute to their friends.

Table 2 Employment Status

Table 3 Geographic Location of Employment

Total	207	26	58 19	19	310
Secretarial Science	49 91	1 2	4 7		54
Mechanical Engineering	15 88		1	1	17
pnivəənipn∃ [sivteubnI	98		1		7
Hotel-Restaurant	4		5		6
Electronic Technology	22 52	7	10	5	42
npisəd & pnittand	27 68	3	7	3	40
Data Processing	30 52	9	15 26	4 /	58
Culinary Technology	3 8		40		2
pnineering [ivi]	9 64	3 22		14	14
Chemical Engineering	6 40		7	2 13	15
noitsratsinimbA aseniaua	36 74	e 9	8 16	4	49
GEOGRAPHIC LOCATION	In Local Area ^a Percentage	In State Percentage	Out of State Percentage	Military Percentage	TOTAL RESPONSE

aLocal area included Buncombe, Haywood and Henderson Counties.

Table 4 Comparison of Beginning and Current Weekly Salaries - Mean

Secretarial Science	84	105	25
Mechanical Engineering	118	165	40
gnineenign3 [&inteubn]	146	196	34
Hotel-Restaurant	150	181	21
Electronic Technology	122	178	46
npisəd & paithand	110	160	45
Data Processing	105	147	40
Culinary Technology	165	215	30
enineering [ivi]	150	179	19
gnivəənign∃ [sɔiməd⊃	150	214	43
noitsrtsinimbA seenisu8	113	147	30
MEAN WEEKLY SALARY	Beginning	Current	Percentage Increase

Table 5 Graduates Response to Value of Degree

Totals	75 26	104 36	32	17 6	288
Secretarial Science	13	26	14 26		53
Mechanical Engineering	7	35	4 24		17
gnivəənign3 [sivtsubn]	2 29	3	2 29		7
Hotel-Restaurant	2 23	33 3	333	11	6
Electronic Technology	14 39	12	8	6 2	36
ngisəd & pnittand	12	13 34	11 29	25	38
Data Processing	8	33	22 39	14	57
Culinary Technology		2 50	2 50		4
gnineering [ivil	7 54	4	2 15		13
gnireering [soimed]	21	6	4 29	1	14
noitsrtsinimbA seenisud	7	10	20	7.3	40
EVALUATION	Required Percentage	Very Necessary Percentage	Helpful Percentage	Not Helpful at All Percentage	TOTAL RESPONSE

Table 6

Comparison of Methods Used to Obtain First Job After Graduation

Totals	97 31	68	26	96 30	19	10	316
Secretarial Science	10 18	23 40	രവ	16 27		വര	22
Mechanical Engineering	7 41	4 24		29	1		17
Enivaenign3 [Eivteubn]	3 43	1 14	1	2 29			7
Hotel-Restaurant	3 27	4 36		4 36			11
Electronic Technology	17 41	10 24	1	8 19	5	1 2	42
ngisəd & paithayd	19 46	71	3 1	11 27	7.3		41
Data Processing	14 25	9 2	8	22 40	4 /	4 2	55
Culinary Technology	9	40					2
gnineering [iviጋ	3 20	33		33	2 14		15
риічээпірп∃ ГызітэнЭ	3 20	13	13	40	2 13		15
noitsytsinimbA eesnieu8	15 29	5 10	16	17	4 2	4 8	51
METHODS USED	Had Before Graduation Percentage	With School Help Percentage	Employment Agency Percentage	Found It Myself Percentage	Went into Military Percentage	Other Percentage	TOTAL RESPONSE

Comparison of Employment Hours While in School

Totals	105 33	33	60	37	87	322	24.33
Secretarial Science	28	10	9	7		54	14.07
Mechanical Engineering	5 29		1	3	8	17	27.94
Eninaenign3 [sintendI			1 17		83.5	9	37.5
Jnsrusts9A-f9toH	3 27	2 18	2 18	1 6	3 27	11	22.73
Electronic Technology	10 24	2 5	3	2 5 2	24 59	41	28.9
ngizəd & gnittand	9	73	8	7	16	43	27.33
Data Processing	26 41	വര	14	10	14	63	16.42
Culinary Technology		80	20			2	17.0
gnineering [ivi]	3 22		50	2	2 14	14	24.25
gniγe⊖nigπ∃ [≲sim⊖d⊃	7	3 20	4 26	1		15	14.33
noitsytsinimbA seenisu8	14 27	9	10	8	15 28	53	24.33
AVERAGE WEEKLY HOURS EMPLOYED	Less than 10 Percentage	10 - 19 Percentage	20 - 29 Percentage	30 - 39 Percentage	40 or more Percentage	TOTAL RESPONSE	MEAN HOURS EMPLOYED

Table 8

Evaluation of the Department Chairman

	<u> </u>		
Curriculum	Total Response	Helpful	Percentage
Business Administration	48	40	83
Chemical Engineering	13	12	92
Civil Engineering	13	13	100
Culinary Technology	4	4	100
Data Processing	60	54	90
Electronic Technology	39	38	97
Hotel-Restaurant	10	8	80
Industrial Engineering	6	4	67
Mechanical Engineering	15	12	80
Secretarial Science	54	52	96
TOTALS	297	266	90

Table 9 Evaluation of Faculty

					. 1
Totals	96 31	180 58	32 10	1 5	310
Secretarial Science	26 48	27 50	5 1		54
Buiraearigna [soinsdoeM	3 19	10 62	3	1	16
gninəənign3 [sinteubn]	1 17	4	17		9
Hotel-Restaurant	30	50	10	10	10
Electronic Technology	21 53	19			40
ngisəd & gnittand	5	33	4 6		42
Data Processing	18 29	37	7		62
Culinary Technology	1 25	3 75			4
gniyə⊖nign∃ [iviJ	5	9	8 1		12
Chemical Engineering	6 46	39	2 15	**	13
noitsntsinimbA aasniau8	7	31	12 23	1 2	51
QUALITY OF TEACHING	Excellent Percentage	Good Percentage	Fair Percentage	Poor Percentage	TOTAL RESPONSE

Table 10 Evaluation of Faculty

ll o	1				
Totals	163 52	137	12		312
Secretarial Sçience	35 65	35			54
Mechanical Engineering	38	92	1		16
Industrial Engineering	33	3	1 17		9
Jusaust29A-[910H	9	40		AMILE STATE OF THE	10
Electronic Technology	33	7			40
ngisəd & puittand	17	24 57 .	1 2		42
Data Processing	34 55	26 42	28		62
Culinary Technology	3 75	1 25		W	4
Civil Engineering	69	31			13
Chemical Engineering	5.36	9			14
noitantsinimbA eesnieu8	13 25	31	7		51
KNOWLEDGE OF SUBJECT	Excellent Percentage	Good Percentage	Fair Percentage	Poor Percentage	TOTAL RESPONSE

DATA FROM DIPLOMA PROGRAMS OVERVIEW

The areas of instruction represented within this grouping were the one year programs of less than college level. In the nine major areas represented there were 530 graduates with 355 questionnaires returned for a sixty-seven percent response.

Ninety-one percent of the graduates were employed; two percent were graduates of the machine shop program who had continued their education in tool and die making and seven percent were unemployed.

Of those employed, seventy-three percent were in the field for which they trained; seven percent were in related fields seventeen percent were in unrelated fields and three percent were in military service with employment unknown.

Eighty-four percent were employed in the local area; six percent were out of the local area but within the State; six percent were out of the State and four percent were in military service.

It was rather coincidental that, as with the Associate degree program graduates, an equal number, thirty-nine percent, were employed on their current jobs before graduation, or found employment for themselves after graduation; twenty-one percent had school help, while only one percent used the services of an employment agency.

In response to, "How necessary was your diploma in obtaining your present position?" the responses were: required-forty percent; very necessary-eighteen percent; helpful-twenty-nine percent and no help at all-thirteen percent.

Of the eighty-one graduates involved in on-the-job training; sixty-five percent were in apprenticeship training; four percent in

management training; nine percent in supervisory training and twenty-one percent in specialized training.

The average hours of employment while attending school were: twenty-six percent worked less than ten hours per week; twelve percent were employed ten to nineteen hours per week; seventeen percent worked twenty to twenty-nine hours per week; eleven percent were employed between thirty and thirty-nine hours a week and thirty-four percent worked forty or more hours a week. The mean hours worked while in school was 24.92 hours a week.

Only forty percent of the vocational graduates used the counseling service after the first quarter; however, eighty-nine percent of those responding rated counseling as well-directed and helpful.

Ninety-seven percent found their department chairman helpful.

The quality of faculty teaching was rated: excellent by fifty-three percent; good by forty-two percent and fair by five percent. Knowledge of subject was rated excellent by seventy-four percent and good by twenty-six percent.

One hundred percent of those responding said they would recommend Asheville-Buncombe Technical Institute to their friends.

PRESENTATION OF DATA BY CURRICULUM

To meet the objectives of this study, evaluation of individual educational offerings and as an aid to counselors in career quidance, the data from the survey were further reduced to the curriculum level. Tables for a comparison of graduate response begin on page seventy-four for the vocational programs.

Air Conditioning and Refrigeration

The air conditioning and refrigeration curriculum had fifty-one graduates during the period covered by the survey. A response of thirty-six was achieved for a seventy-one percent return.

Thirty-three of those responding were employed with seventeen in the area for which they trained; five were in related areas; ten in unrelated employment and one in military service. (See Table 11)

The geographic location of the graduates employed was: twenty-seven in the local area; three outside the local area but within the State; one outside the State and one in military service, location unknown. (See Table 12)

The mean beginning salary was \$102 per week with a current mean of \$149 a week for a forty-six percent increase. (See Table 13)

Thirteen of those responding were involved in on-the-job training. Eight were in apprenticeship training; two were in supervisory training and three were in specialized training.

In answer to the question, "How necessary was your diploma in obtaining your present position?" three said the diploma was required; eight said the diploma was very necessary; eleven said the diploma was helpful and eight said that it was no help at all. (See Table 14)

The first job after graduation was obtained by the following methods: thirteen had their jobs before graduation; two had school help in obtaining jobs; one used the services of an employment agency in locating a job; fifteen found employment for themselves and three went into military service. (See Table 15)

The average hours worked while attending school were reported as: seven worked less than ten hours a week; five worked between ten and nineteen hours a week; eight were employed from twenty to twentynine hours a week; four worked thirty to thirty-nine hours a week and eight worked forty hours or more a week. The mean hours of employment while in school was 24.06. (See Table 16)

Ten of thirty-three who responded said they had used the service of the counseling staff after the first quarter. Fifteen of eighteen evaluated counseling as well-directed and helpful.

Twenty-nine of thirty-two, ninety-one percent, found their department chairman helpful. (See Table 17)

Quality of faculty instruction was rated excellent by fourteen; good by fifteen and fair by three. (See Table 18) Faculty knowledge of subject was rated excellent by eighteen and good by twelve. (See Table 19)

All who responded said they would recommend Asheville-Buncombe Technical Institute to their friends.

Automotive Mechanics

The automotive mechanic curriculum had sixty-two graduates in the period covered by the survey. The response to the questionnaire was forty-five for a seventy-three percent return.

Forty-three of those who responded were employed with twenty-six in the field for which they trained; four in related employment, twelve in unrelated areas and one was in military service with employment unknown. (See Table 11)

The geographic location of those employed was: thirty-five were in the local area; three were outside the local area but within the State; two were outside the State and three were in military service, location unknown. (See Table 12)

The mean beginning salary was \$106 per week with a current mean of \$129 per week for a twenty-two percent increase. (See Table 13)

Fifteen of the graduates were involved in on-the-job training. Six were in an apprenticeship program; one was in management training; three were in supervisory training and five were in specialized training.

Four of the graduates found the diploma was required in obtaining their present employment; six reported the diploma was very necessary; twenty-three said the diploma was helpful and six responded that it was no help at all. (See Table 14)

Fifteen of the graduates had their present jobs before graduation; eight were employed with school help; one used the service of an employment agency in securing a job; ten found jobs themselves; seven went into military service and two used other means of finding work. (See Table 15)

The average hours employed while attending school was reported as: five were employed less than ten hours a week; five worked from ten to nineteen hours a week; twelve were employed between twenty and twenty-nine hours a week; six worked between thirty and thirty-nine hours a week and seventeen were employed forty or more hours a week. The mean hours worked while in school was 28.67. (See Table 16)

Seventeen of forty-five said they had used the counseling service after the first quarter. Twenty-five of twenty-six evaluated counseling as well-directed and helpful.

Thirty-eight, ninety-seven percent, said their department chairman was helpful. (See Table 17)

The quality of faculty teaching was rated excellent by sixteen; good by twenty and fair by five. (See Table 18) Faculty knowledge of subject was rated excellent by twenty-nine and good by fifteen. (See Table 19)

The forty-five who responded said they would recommend Asheville-Buncombe Technical Institute to their friends.

Building Construction

The building construction curriculum had twenty-seven graduates during the period of the survey. The response to the questionnaire was twenty for a seventy-four percent return.

Sixteen of those who responded were employed. Eight were in the area for which they trained and eight were in unrelated employment. (See Table 11)

Of those employed ten were in the local area; four were outside the local area but within the State and two were outside the State.

(See Table 12)

The mean beginning salary was \$100 per week with a current mean of \$135 per week for a thirty-five percent increase. (See Table 13)

Only two of the graduates were involved in on-the-job training.

One was in an apprenticeship program and one was in management training.

One graduate found his diploma required for employment in his present job; one reported that the diploma was very necessary; seven said it was helpful and six said it was no help at all. (See Table 14)

Three of those who responded had their jobs before graduation; one had school help in obtaining employment; one used the services of an employment agency; eleven found jobs themselves and two went into military service. (See Table 15)

The average hours of employment while in school was: four were employed less than ten hours a week; five worked between ten and nineteen hours a week; three were employed between twenty and twenty-nine hours a week; three worked from thirty to thirty-nine hours a week and three were employed forty or more hours a week. The mean hours employed while in school was 21.94. (See Table 16)

Eight of the twenty who responded said they had used the counseling service after the first quarter. Ten of those who responded said that the counseling was well-directed and helpful.

All those who responded to the question said that the department chairman was helpful. (See Table 17)

The quality of faculty teaching was rated as excellent by nine and good by seven. (See Table 18) Faculty knowledge of subject was rated excellent by twelve; good by four and fair by one. (See Table 19)

All those who responded to the questionnaire said they would recommend Asheville-Buncombe Technical Institute to their friends.

Diesel Engines and Hydraulic Systems

The diesel engines and hydraulic systems curriculum had forty-four graduates during the period covered by the survey. There was a response from thirty-one of the graduates for a seventy-one percent return.

All thirty-one of the graduates were employed with fourteen in the field for which they trained; three were in related employment; ten in unrelated fields and four in military service. (See Table 11)

The geographic location of those employed were: eighteen were in the local area; five were out of the local area but within the State; four were outside the State and four were in military service. (See Table 12)

The mean beginning salary was \$106 per week with a current mean of \$140 a week for a thirty-two percent increase. (See Table 13)

Only four of the graduates were involved in on-the-job training; three were in apprenticeship training and one was in supervisory training.

One graduate reported that the diploma was required in order to obtain his present position; five replied that the diploma was very necessary; fifteen said that it was helpful and seven responded that it was no help at all. (See Table 14)

The first job after graduation was obtained by ten of the graduates with school help; four had their jobs before graduation; eight found employment themselves; six went into military service and one used some other method of obtaining employment. (See Table 15)

The average hours employed while in school was reported as: seven worked less than ten hours a week; six worked between ten and nineteen hours a week; four were employed between twenty and twenty-nine hours a week; seven were employed thirty to thirty-nine hours a week and six worked forty or more hours a week. The mean hours employed while in school was 23.67. (See Table 16)

Sixteen of twenty-six said they had used the counseling service after the first quarter and eighteen said that counseling was well-directed and helpful.

The twenty-seven who responded to the question said their department chairman was helpful. (See Table 17)

The quality of faculty teaching was rated as excellent by fourteen and good by ten. (See Table 18) Faculty knowledge of subject was rated as excellent by twenty-one and good by five. (See Table 19)

The thirty who responded to the question stated that they would recommend Asheville-Buncombe Technical Institute to their friends.

Machine Shop

The machine shop curriculum had 121 graduates during the period covered by the survey. Completed questionnaires were received from sixty-one for a fifty percent response.

Fifty-five of those responding were employed and six were continuing their education in the tool and die making curriculum.

Of those employed forty-five were in the field for which they trained; three were in related employment and seven were in unrelated work. (See Table 11)

Fifty-two were employed in the local area; two were outside the local area but within the State and one was outside the State. (See Table 12)

The mean beginning salary was \$101 per week with a current mean of \$146 per week for an increase of forty-five percent. (See Table 13)

Eighteen of the graduates were involved in on-the-job training; fourteen were in apprenticeship training and four were in specialized training.

In response to, "How necessary was your diploma in obtaining your present position?" fourteen reported that the diploma was required; sixteen said very necessary; sixteen responded helpful and seven said that the diploma had been no help at all. (See Table 14)

Methods of obtaining employment after graduation were:
thirty-seven had jobs before graduation; five had school help in finding
employment; one used the service of an employment agency; thirteen
found jobs themselves; one went into military service and one used
some other method of finding employment. (See Table 15)

The average number of hours worked while in school was reported as: two worked less than ten hours a week; four were employed between ten and nineteen hours a week; five worked from twenty to twenty-nine hours a week; two were employed thirty to thirty-nine hours a week and forty-five worked forty or more hours a week. The mean hours of employment while in school was 35.6. (See Table 16)

Only twenty-one of fifty graduates reported that they had used the counseling service after the first quarter; however, twenty-nine of thirty-two responded to the question and stated that counseling was well-directed and helpful. The department chairman was rated as helpful by forty-nine of the fifty-one who responded to the question. (See Table 17)

The quality of faculty teaching was evaluated as excellent by twenty; good by thirty-five and fair by five. (See Table 18) Faculty knowledge of subject was rated excellent by thirty; good by twenty-eight and fair by one. (See Table 19)

All sixty-one of the graduates said they would recommend Asheville-Buncombe Technical Institute to their friends.

Medical Laboratory Assistant

The medical laboratory assistant curriculum had eleven graduates in one year covered by the survey. The first class graduated in 1971. The response to the survey was ten for a ninety-one percent return.

The ten who responded were employed; nine were in the field for which they trained and one was in an unrelated area. (See Table 11)

Nine of the graduates were in the local area and one was outside the local area but within the State. (See Table 12)

The mean beginning salary was \$92 a week with a current mean of \$108 a week; an increase of seventeen percent was achieved in one year. (See Table 13)

Five of the graduates who responded to, "How necessary was your diploma in obtaining your present position?" said that it was required; while four said it was very necessary. (See Table 14)

Employment was obtained in the following manner: two were employed in their present jobs before graduation; one had school help in finding a job; five found jobs themselves and two used other means of obtaining their employment. (See Table 15)

The average hours employed while in school were: four worked less than ten hours a week; three were employed ten to nineteen hours a week and one was employed forty or more hours a week. The mean hours employed while in school was 13.13 a week. (See Table 16)

The counseling service was used by four of ten; however, five of six evaluated counseling as well-directed and helpful.

The department chairman was rated as helpful by eight of nine responding to the question. (See Table 17)

The quality of faculty teaching was rated excellent by three; good by five; fair by one and poor by one. (See Table 18) Faculty knowledge of subject was rated excellent by six and good by four. (See Table 19)

The ten who responded to the survey said they would recommend Asheville-Buncombe Technical Institute to their friends.

Practical Nurse Education

The practical nurse education curriculum had 128 graduates in the period covered by the survey. Questionnaires were returned by 103 for an eighty percent response.

Eighty-eight of the graduates were employed. Eight-two were in the field for which they trained; five were in related fields and one was in unrelated employment. (See Table 11)

The geographic location of those employed were: seventy-nine were in the local area; two were outside the local area but within the State and seven were outside the State. (See Table 12)

The mean beginning salary was \$98 per week with a current mean of \$120 a week for a twenty-two percent increase. (See Table 13)

Six of the graduates were involved in on-the-job training; one was in supervisory training and five were in specialized training.

In response to, "How necessary was your diploma in obtaining your present position?" seventy-three responded that it had been required; nine stated that it had been very necessary; four said it was helpful and two responded that the diploma had been no help at all.

(See Table 14)

Methods used in obtaining employment were: twenty-nine had jobs before graduation; twenty-two had school help in obtaining employment and thirty-seven found jobs for themselves. (See Table 15)

The average number of hours employed a week while in school was reported as follows: forty-three were employed less than ten hours a week; six worked between ten and nineteen hours a week; six were employed twenty to twenty-nine hours a week; ten worked thirty to thirty-nine hours a week and fourteen were employed forty or more hours a week. The mean hours of employment while in school was 17.28 a week. (See Table 16)

Forty of the graduates said they had used the counseling service after the first quarter. Fifty of fifty-one evaluated counseling as well-directed and helpful.

The department chairman was rated as helpful by eighty-three of eighty-four graduates. (See Table 17)

The quality of faculty teaching was evaluated as excellent by sixty-six and good by twenty-five. (See Table 18) Faculty knowledge of subject was rated as excellent by eighty-two and good by thirteen. (See Table 19)

All of the graduates who responded to the survey said they would recommend Asheville-Buncombe Technical Institute to their friends.

Tool and Die Making

The tool and die making curriculum had fifty graduates during the period covered by the survey. Questionnaires were received from twenty-six for a fifty-two percent return.

Twenty-four of the graduates were employed. Twenty-one were in the field for which they trained; two were in related fields and one was in military service. (See Table 11)

Twenty-three of the graduates were in the local area and one was in military service, location unknown. (See Table 12)

The mean beginning salary was \$121 a week with a current mean of \$151 a week for a twenty-five percent increase. (See Table 13)

Twenty of the graduates were in apprenticeship programs.

The diploma was required in obtaining the present position for fifteen; very necessary for four; helpful for four and no help at all for one. (See Table 14)

Nine of the graduates had their jobs before graduation; ten found employment with school help; six found jobs for themselves and one went into military service. (See Table 15)

The average hours worked per week while in school was: four worked less than ten hours a week; two were employed ten to nineteen hours a week; ten worked twenty to twenty-nine hours a week; two were employed thirty to thirty-nine hours a week and seven worked forty or more hours a week. The mean hours of employment while in school was 23.20. (See Table 16)

The counseling service was used by nine of twenty-four after the first quarter; however, seventeen of nineteen who responded to the question evaluated counseling as well-directed and helpful.

The department chairman was rated as helpful by all of the graduates who responded to the survey. (See Table 17)

The quality of faculty teaching was rated as excellent by fourteen and good by ten. (See Table 18) Faculty knowledge of subject was evaluated as excellent by twenty-one and good by three. (See Table 19)

All graduates who responded to the survey said they would recommend Asheville-Buncombe Technical Institute to their friends.

Welding

The welding curriculum had thirty-six graduates during the period covered by the survey. Questionnaires were returned by twenty-three for a response of sixty-four percent.

Twenty-one of the graduates were employed. Thirteen were in the field for which they trained; one was in a related field; five were in unrelated areas and two went into military service. (See Table 11)

The geographic location of those employed were: sixteen were in the local area; one was out of the State and four were in military service. (See Table 12)

The mean beginning salary was \$103 per week with a current mean of \$128 a week for a twenty-four percent increase. (See Table 13)

Only three of the graduates were involved in on-the-job training; one was in an apprenticeship program; one was in management training and one was in specialized training.

The diploma was reported required for five in obtaining their present positions; very necessary for three and for ten it was no help at all. (See Table 14)

Four graduates were employed before completing their training; two had school help in obtaining employment; twelve found jobs for themselves; two went into military service and one used some other means for finding employment. (See Table 15)

The average hours employed per week while in school was: five worked less than ten hours a week; three were employed between ten and nineteen hours a week; six worked between twenty and twenty-nine hours a week; one was employed between thirty and thirty-nine hours a week and eight were employed forty or more hours a week. The mean hours employed while in school was twenty-five. (See Table 16)

Counseling services was used by nine of twenty-four after the first quarter; however, thirteen of fourteen who responded to the question rated counseling as well-directed and helpful.

The department chairman was evaluated as helpful by all who answered the question. (See Table 17)

The quality of faculty teaching was rated as excellent by fourteen; good by five and fair by one. (See Table 18) Faculty knowledge of subject was evaluated as excellent by eighteen and good by ten. (See Table 19)

All who responded to the survey said they would recommend Asheville-Buncombe Technical Institute to their friends.

Table 11 Employment Status

Totals	235	23	54 15	თ ო	30	351
Мејding	13 56	1 4	522	26	0 0	23
Tool & Die Making	21 80	8 7		1	8 2	26
Practical Murse noitabuba	88	വവ			15 14	103
Vaotanodal LabibeM tnataiasA	6		10			10b
Machine Shop	45 74	വ	7		6a 10	61
Diesel Engines and Hydraulic Systems	14 45	3	10	4		31
Ruilding Construction	8 44		8		2 12	18
Automotive Mechanics	26 58	4 6	12 27	1 2	2 4	45
-pninoitibnoJ viA noit&rapiv1aA	17 50	5 15	10	3 11	3 1	34
EMPLOYMENT STATUS	EMPLOYED In Field Percentage	Related Field Percentage	Unrelated Field Percentage	Military Percentage	UNEMPLOYED Percentage	TOTAL RESPONSE

^aThe six unemployed in machine shop were students in tool and die making.

bonly one class had graduated.

Table 12 Geographic Location of Employment

		S	uc							
GEOGRAPHIC LOCATION	- gninoitibnoJ viA noitsyagiv19A	Automotive Mechanic	Building Construction	Diesel Engines and Hydraulic Systems	Machine Shop	Vadical Laboratory finstsizzA	Practical Nurse Education	Tool & Die Making	BuibleW	Totals
In Local Area ^a Percentage	27 85	35 81	10 63	18 58	52 95	6	79	23 96	16 76	269 84
In State Percentage	ოთ	7.3	4 25	5 16	4 2	10	2 2			20 6
Out of State Percentage	3.1	2 5	2 12	4			7 8		1 2	18
Military Percentage	3.1	33		13				4	19	13 4
TOTAL RESPONSE	32	43	16	31	55	10	88	24	21	320

^aLocal area included Buncombe, Haywood and Henderson Counties.

Table 13 Comparison of Beginning and Current Mean Weekly Salary

11			
Melding	103	128	24
Tool & Die Making	121	151	25
Practical Nurse Education	86	120	22
Medical Laboratory tnatsizzA	36	108	17a
Machine Shop	101	146	45
Diesel Engines and Hydraulic Systems	106	140	32
Building Construction	100	135	35
soinsdom evitomotuA	106	129	22
- pninoitibnoo viA Refrigeration	102	149	46
MEAN WEEKLY SALARY	BEGINNING	CURRENT	PERCENTAGE INCREASE

^aIncrease based on one year employment.

Table 14 Graduates Response to Value of Diploma

Totals	121 40	56 18	30	37	304
guibləW	5 28	3	10 55		18
Tool & Die Making	15 62	4	4	1 4	24
Practical Nurse Education	73 83	9	4 2	2 2	88
Medical Laboratory Anstriant	56	44			6
qod2 ənidəsM	14 27	16 30	16 30	7	53
Diesel Engines and emstsy2 silusybyH	1	18	15 53	7 25	28
Building Construction	1 7	1 7	46	40	15
Automotive Mechanics	11	6 15	23	6 15	39
-Air Conditioning- noitaragiriaR	3	8 27	11 36	8 27	30
EVALUATION	Required Percentage	Very Necessary Percentage	Helpful Percentage	Not Helpful at All Percentage	TOTAL RESPONSE

With School Help Percentage TOTAL RESPONSE Had Before Graduation METHODS USED Found it Myself Percentage Went into Military Employment Agency Percentage Percentage Percentage Percentage Air Conditioning-44 ဖ ယ ω \vdash Refrigeration 23 Automotive Mechanic **Building Construction** 17 Diesel Engines and Hydraulic Systems 34 14 Machine Shop ထ ပာ Medical Laboratory Assistant Practical Nurse Education 38 Tool & Die Making 57 19 Welding Totals 35 36 19

Comparison of Methods Used to Obtain First Job After Graduation

Table

Table 16 Comparison of Employment Hours While in School

AVERAGE WEEKLY HOURS OF EMPLOYMENT OF EMPLOYMENT											
7 5 4 7 2 4 43 44 5 52 11 22 23 3 50 54 43 4 5 16 11 27 20 7 38 8 8 13 8 12 3 4 5 6 10 6 13 4 6 3 7 2 8 40 26 12 13 17 23 3 12 8 4 6 8 17 3 6 45 12 8 4 8 17 3 6 45 12 8 4 8 17 3 6 45 18 28 35 3 8 17 3 10 58 8 79 25 23 3	KLY HOURS MENT	- pninoitibnoD viA noitsvapiv1aA	Automotive Mechanic	Building Construction		Machine Shop			Tool & Die Making	БиірГэМ	Totals
5 5 6 4 3 6 2 3 8 3 8 3 8 13 3 4 5 7 38 8 10 6 13 13 4 5 8 40 6 13 4 5 8 40 66 26 1 6 1 6 1 6 6 1 6 6 1 6 6 4 6 1 6 7 6 4 6 7 6 4 6 4 6 4 6 1 6 7 6 1 6 1 6 1 6 4 6 1 6 4 6 1 6 4 6 1 6 4 6 1 6 4 6 1 6 1 6 1 6 1 6 1 6 1 6 4 <th< td=""><td>0.4</td><td>22</td><td>5 11</td><td>4 22</td><td>7 23</td><td>3.2</td><td>4 50</td><td>43 54</td><td>4</td><td>5 22</td><td>81 26</td></th<>	0.4	22	5 11	4 22	7 23	3.2	4 50	43 54	4	5 22	81 26
8 12 3 4 5 6 10 6 10 6 26 10 6 26 1 6 26 1 4 6 3 7 2 1 10 2 1 8 4 4 6 3 7 23 3 12 12 12 8 4 <	0	16	11	5 27	6 20	4 /	38 3	9 8	8 7	133	39 12
4 6 3 7 2 10 2 1 12 13 17 23 45 1 12 8 4 25 38 17 20 78 12 18 7 8 1 SE 32 45 18 30 58 8 79 25 23 3 mployed 24.06 28.67 21.94 23.67 35.60 13.13 17.28 23.20 25.00 23	ı - 29 Percentage	25	12 27	3	14	ഗ റ		9 8	10	6 26	54 17
SE 17 3 6 45 1 14 7 8 1 SE 32 45 18 30 58 8 79 25 23 35 mployed 24.06 28.67 21.94 23.67 35.60 13.13 17.28 23.20 25.00 23) - 39 Percentage	4	6	3	7 23	3.2		10	8 2	1 4	35 11
32 45 18 30 58 8 79 25 23 3 3 loyed 24.06 28.67 21.94 23.67 35.60 13.13 17.28 23.20 25.00 23	or more Percentage	25	17 38	3	6 20	45 78	1 12	14 18	7 28	35	109 34
24.06 28.67 21.94 23.67 35.60 13.13 17.28 23.20 25.00 23	NSE	32	45	18	30	28	8	79	25	23	318
	Employed	24.06	28.67	21.94	23.67		13.13	17.28		25.00	23.62

Table 17

Evaluation of Department Chairman

CURRICULUM	TOTAL RESPONSE	HELPFUL	PERCENTAGE
Air Conditioning- Refrigeration	32	29	91
Automotive Mechanics	39	38	97
Building Construction	17	17	100
Diesel Engines and Hydraulic Systems	27	27	100
Machine Shop	51	49	96
Medical Laboratory Assistant	9	8	89
Practical Nurse Education	84	83	99
Tool & Die Making	23	23	100
Welding	23	23	100
TOTALS	305	297	97

Table 18 Evaluation of Faculty

Totals	170 53	132 42	15 5	0 1	318
Melding	14 70	5 25	1 2		20
Tool & Die Making	14 58	10			24
Practical Nurse Education	66 73	25 27			91
Wedical Laboratory facisistant	30	50	10	10	10
Machine Shop	20	35 58	രവ		09
Diesel Engines and Rydraulic Systems	14 58	10 42			24
noitountenoo gnibliud	9.	7 44			16
Automotive Mechanic	16 39	20 49	12		41
-pninoitibnoJ viA noitsyepiv1=A	14 44	15 47	ონ		32
QUALITY OF TEACHING	Excellent Percentage	Good Percentage	Fair Percentage	Poor Percentage	TOTAL RESPONSE

Totals	237	86 26	2		325
риibleW	18	2 10			20
Tool & Die Making	21 88	3			24
Practical Nurse Education	82 86	13 14			95
Vodical Laboratory JuatsiseA	9	40			10
Machine Shop	30 51	28	1 2		59
Diesel Engines and Hydraulic Systems	21 81	19			26
Building Construction	12 71	4 24	2		17
Automotive Mechanics	29 66	15 34			44
-pninoitibnoJ viA noit&rapirv19A	18	12 40			30
KNOWLEDGE OF SUBJECT	Excellent Percentage	Good Percentage	Fair Percentage	Poor Percentage	TOTAL RESPONSE

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

During the period of February through May, 1972, the Appalachian Developing Institutions Consortium conducted a graduate follow-up of Asheville-Buncombe Technical Institute students who had completed requirements for graduation between the years 1966-67 and 1970-71. From 941 questionnaires mailed a return of 691 or seventy-three percent was achieved. The percentage was considered adequate for analysis and a report was produced by the Consortium which provided the Institute an excellent overview of the total graduate body. The report, however, was not useful in the evaluation of individual course offerings nor as an aid to the counselors in career guidance.

It was decided that further evaluation of the data was needed to serve these objectives. The results of this evaluation may be summarized as follows:

Graduates working within their field of training ranged from thirty-seven percent in data processing to one hundred percent in industrial engineering technology in the degree programs and from forty-four percent in building construction to ninety percent in medical laboratory assistant in the vocational programs.

North Carolina was fortunate in retaining most of the graduates.

The degree graduates who remained in the State ranged from forty percent

in chemical engineering technology to ninety-two percent in secretarial science and in the vocational division the graduates who remained in the State ranged from sixty-three percent in building construction to ninety-nine percent in machine shop. The vocational graduates appeared to be more inclined to remain in the State, or there were more jobs available for them.

The lowest mean beginning salary in the degree programs was \$84 a week for secretarial science to the highest mean beginning salary of \$165 a week for culinary technology. In the vocational division the lowest mean beginning salary was \$92 a week for medical laboratory assistant to the highest mean beginning salary of \$121 a week for tool and die making.

The largest percentage increase in salary in the degree programs was forty-six percent for the electronic technology graduates from a mean beginning salary of \$122 a week to a current mean of \$178 a week. In the vocational division the largest percentage increase in salary was for the graduates of air conditioning-refrigeration from a mean beginning salary of \$102 a week to a mean current salary of \$149 a week for a forty-six percent increase. It should be noted that when the survey was conducted the graduates of the tool and die making curriculum were still in apprenticeship programs and had not completed the necessary training to become tool and die makers.

The medical laboratory assistant graduates earned a seventeen percent salary increase from a low beginning mean of \$92 a week to a current mean of \$108 a week within one year. There was no evidence to support a belief that this percentage increase would continue at this rate; however, it was gratifying to observe that the graduates were

considered worthy of such an increase in so short a time. The graduates were to be congratulated for proving their worth so quickly.

In the area of, "How necessary was your degree/diploma in obtaining your present position?" the results tended not to seem valid in the light of the fact that there were two vocational programs where the training received was required for employment. One was practical nurse education in which a State Board examination must be passed to become a Licensed Practical Nurse. The second of the programs was tool and die making where the training was necessary to become an apprentice.

In the practical nurse education program eighty-two graduates were employed in the field for which they trained; however, only seventy-three of them said that their diploma was required. Also, there were twenty tool and die making graduates in apprenticeship programs but only fifteen said their diploma was required.

The ambiguity might have been avoided had the questionnaire asked, "How necessary was your training. . . ?" instead of, "How necessary was your degree/diploma. . . ?"

The hours of employment while attending school ranged from a mean of 14.07 a week for secretarial science graduates to a mean of 37.5 hours a week for industrial engineering technology graduates in the degree programs. In the vocational programs the range was from 13.13 hours a week for medical laboratory assistant to 35.6 hours a week for machine shop graduates.

A study of hours employed indicated that the graduates of traditionally "female" curriculums were employed fewer hours a week then the graduates of traditional "male" curriculums. It was also found that instructional programs which had evening classes had longer

hours of employment while in school. As an example: industrial engineering technology was the only totally evening program and the mean working hours were 37.5 a week; however, machine shop with a 35.6 hour a week employment record was both day and evening programs, while diesel engines and hydraulic systems was totally a day program and had an employment mean of 23.67 hours a week.

After graduation, a student had a better than seventy percent chance of being employed within his field of training in North Carolina. It was also possible to be employed part or full-time while completing requirements for graduation.

In the area of evaluation the vocational graduates as a whole appeared to find their department chairman more helpful than did the graduates of the degree programs. The graduates of four of the nine instructional programs were unanimous in their evaluation of the department chairman being helpful. The lowest percentage response in the degree programs was sixty-seven percent in the industrial engineering technology program and in the vocational division eighty-nine percent in the medical laboratory assistant program. It should be noted, however, that the eighty-nine percent in medical laboratory was generated by one graduate of nine and in industrial engineering technology the sixty-seven percent was two of six graduates.

The quality of teaching was rated good to excellent by the graduates in a range from a low of seventy-five percent in business administration to two highs of one hundred percent in culinary technology and in electronic technology in the degree programs. Only two graduates out of 312, 0.6%, rated teaching as poor.

In the vocational division teaching was rated good to excellent in a range from eighty percent in medical laboratory assistant to one hundred percent in building construction, diesel engines and hydraulic systems, practical nurse education and tool and die making. Only one graduate of 318, 0.3%, rated teaching as poor.

Knowledge of subject was evaluated even higher than quality of teaching by all graduates. In the degree programs the rating good to excellent was made by all but twelve of the 312 graduates. The four percent said knowledge was fair. The low rating was given by industrial engineering technology with eighty-three percent, five of six, responding good to excellent. The highest rating, one hundred percent, was given to six of the eleven curriculums: chemical engineering technology, civil engineering technology, culinary technology, electronic technology, hotel-restaurant management and secretarial science.

In the vocational division all areas were rated good to excellent in knowledge of subject except building construction and machine shop. One student in each of the two curriculums rated knowledge as fair.

There are no better recruiters for any institution than graduates who found value in their education. Such is the position of Asheville-Buncombe Technical Institute. One hundred percent of all vocational graduates and ninety-eight percent of the degree graduates stated that they would recommend Asheville-Buncombe Technical Institute to their friends. Such recommendations speak more loudly for the value of the Institute than could any written words.

CONCLUSIONS AND RECOMMENDATIONS

Chapter 115A Public School Law of North Carolina authorized the establishment of the Community College system. Article 1, section 1, gave the purpose for which the schools were established.

Did the Institute justify its existence as far as Chapter 115A-1 was concerned?

An investigation of the data from the graduate follow-up revealed a seventy-three percent return. No incentives were used to elicit response. A return of this size for a five year follow-up was considered exceptionally good.

The conclusion was reached that Asheville-Buncombe Technical Institute had a graduate body that was interested in and loyal to the school. A review of the graduate follow-ups from other schools within the Department of Community Colleges indicated a total institutional return ranging from thirty-two to fifty-eight percent for one year.

From an economic point of view, 522 graduates are employed in the State with an additional 108 outside the State or in military service. The aggregate salary of the 630 who responded to the question was \$4,325,100 a year. The total salary for the 522 within the State was \$3,589,833 a year. ¹

¹Generalizing from the sample to the total graduate population it could be assumed, had there been a hundred percent response, the aggregate salary for all graduates in this survey would amount to six million dollars. Using the same generalization it could be assumed that the total salary for those in North Carolina would amount to just under five million dollars a year.

These figures would lead to the conclusion that within one to five years from the original investment North Carolina was receiving a good return on the tax dollars invested on education for these students.

Well over three-quarters of the graduates were employed in the field for which they trained; therefore, Asheville-Buncombe Technical Institute was obviously training individuals for available employment.

A significant fact was that only six percent of the graduates were not employed. A limiting aspect of the survey was that there were not adequate means available for determining why these individuals were not in the labor force.

The answer to whether Asheville-Buncombe Technical Institute had justified its existence could only be answered with a definite yes! The Institute had indeed served the purpose for which it was established.

Were there weak areas within the Institute?

To determine whether there were weak areas in the Institute an investigation would be needed into several areas that appeared, on the surface, to be in some difficulty.

The results of the survey from the data processing curriculum would indicate that serious consideration be given to revision of the existing curriculum or the addition of an option in the curriculum to more adequately train students for employment available in the local area or elsewhere in the State. It should be noted that Western North Carolina was more limited in occupational opportunities for data processing graduates than were larger metropolitan areas. However, the number of computer centers was increasing in the local area. Asheville-Buncombe Technical Institute served the entire Western North Carolina region with this curriculum since other institutions did not offer data processing.

An examination of graduate employment status for data processing highlights the fact that only twenty-four of sixty-six graduates were working in the field as programmers or system analysts. An additional sixteen were in closely related fields such as machine operators or accounting. Of the twenty-four in programming or system analysts, eleven left the State to find employment in their field.

All schools have problems with student retention and Asheville-Buncombe Technical Institute was no exception. Student retention was another area that needed investigation. It was recognized that culinary technology and hotel-restaurant management were newly offered instructional programs; however, the graduate percentages were less than twenty-five percent of the students who entered the programs.

Positive action should be undertaken to retain the students who entered the Institute. The fact had long been realized that attrition would claim between forty and forty-five percent of entering students. Follow-up studies of students who withdrew were needed, but would be of little benefit to the Institute unless action was taken to correct any defects revealed by such surveys.

Corrective action in the area of student retention could be the initiation of a "common quarter." The "common quarter" would have to be, of necessity, on a divisional basis. The entering student would be in general education courses for the first quarter with survey courses in all areas within the division of his choice. The student would have the opportunity to study each curriculum offering in an effort to avoid:

(1) entering programs that would not challenge his ability, (2) be too much challenge for a limited background, (3) a program in which there was no interest, ability or aptitude, or (4) one for which the student

had a misconception of a "glamour" job awaiting him on graduation. For students entering post-secondary education for the first time the "common quarter" should assist greatly in allowing them to make a more knowledgable choice of career.

Using only the information supplied by the students on the survey as means of determining job placement; the fact was evident that more effort should be made by the Institute or department chairman or both in assisting students in obtaining employment. One hundred twenty-nine students of 643 who answered the question had school help in obtaining work; this is over twenty percent, while at the same time 213 or thirty-three percent of the students found employment for themselves. The ratio of school help in comparison with other schools in the North Carolina Community College system is not out of line, but more could be done to help the students find work.

There were a number of curriculums which deserved special mention for performing above average assistance in the area of job placement; they were: civil engineering technology, culinary technology, electronic technology, hotel-restaurant management, mechanical technology and secretarial science in the degree divisions and diesel engines and hydraulic systems, practical nurse education and tool and die making in the vocational division.

Fifteen percent of the degree program graduates and three percent of the vocational graduates did not find their department chairman helpful. While the actual number was small, forty-nine, the question remained, "Why did these forty-nine respond as they did?" What conclusions could be drawn? Were they night students who never saw a department chairman? Were they students who carried a sense of

resentment? Was the department chairman really negligent in assisting the student? What was the academic standing of these students?

It was recommended that each department chairman who was involved do a self-inventory to determine if he really was doing all he could to assist his students and not just the "A" or "B" student.

Were there strong points to be found from the survey?

Study of the data indicated that there were many areas in which the administration and the faculty could take pride.

As previously stated the Institute was training individuals for available employment with ninety-two percent employed and one percent continuing their education.

The instructional program was evaluated good to excellent by eighty-nine percent of the degree graduates and by ninety-five percent of the vocational graduates. Faculty knowledge of subject taught was rated good to excellent by ninety-six percent of the degree graduates and by ninety-nine percent of the vocational graduates.

Ninety-nine percent of all graduates said they would recommend Asheville-Buncombe Technical Institute.

A study that should prove interesting would be a questionnaire submitted to all students during the fall quarter each year to determine why the student selected Asheville-Buncombe Technical Institute as the school for their post-secondary education. Did graduates really recommend, and influence individuals to attend, the Institute?

Another study that should be undertaken would be a comparison of the college transfer student and the Bachelor of Technology student at Appalachian State University. A comparison of the Associate in Arts student and the Associate in Applied Science student should prove

valuable to the administration and faculty of the University, Technical Institutes and Community Colleges.

The mean current salary for degree graduates was \$172 a week and \$134 for vocational graduates. These salaries compare favorably with the salaries of graduates from other schools within the Community College system.

There were areas within the Institute which needed investigation and other areas in which the faculty and administration could take pride. The strengths of the Institute would appear to outweigh the weaknesses revealed by the survey.

It is recommended that graduate follow-ups be conducted each year with composite surveys at three and five year intervals. With yearly follow-ups the Institute could become aware of any shifts in employment opportunities and have a plan established to make any necessary adjustments in the curriculum offerings. There would be a yearly evaluation of educational programs and any real weaknesses could be identified before they became a major problem; and the counselors would have up-to-date information available for counseling new students in career opportunities.

It is strongly recommended that an employer survey be undertaken, in cooperation with the advisory committees of each curriculum, to determine whether the graduates of Asheville-Buncombe Technical Institute were obtaining the knowledge required to perform satisfactory work, any additional education the employer considered necessary, and an evaluation of the graduate by the employer. Was Asheville-Buncombe Technical Institute educating poor, average, above average or superior employees?

Finally, the graduates had been well trained, as they indicated themselves, and had greatly benefited from their education. Not only had the graduates improved personally, but the community was bettered both financially and culturally by having 522 well educated individuals employed in the area.

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APPENDIX

ALUMNI EMPLOYMENT INFORMATION RESPONSES FOR TOTAL POPULATION 1966-67 to 1970-71

APPENDIX A

esent Employment St	atus			Number	Percent
ll-time					0.0
e full-time job				555	83
o full-time jobs e full and one part	atima ich			2 28	0 4
	nore part-time jobs			20	0
	note pare erme jobs				
rt-time					, 19 m. <u></u>
e part-time				31	5
or more part-time				2	0
employed				_54	8
				674	100
		Beginning	Salaries	Current	Salaries
		in Present	Position	in Preser	t Position
ekly Salary Ranges		Number	Percent	Number	Percent
-\$ 49 Note:	Tallies by computer for	29	5	12	2
50-\$ 99	the zero to \$49.00 range	232	41	101	17
00-\$149	are inflated.	237	42	255	. 44
50-\$199		50	9	139	24
00-\$249		6	1	39	7
50-\$299		5	1	18	3
00-\$349		4	1	3	1
50-\$399		1	0	4	1
00-		-3	0	<u>8</u> 579	100
		567	100	5/9	100
ımni Employment Out	side Field of				
Preparation at This				Number	Percent
iting for job in fi	leld			43	7
d not like field				99	. 10
ner				423	18 74
estion not applicat	ore			572	100
e: Further examin	nation of "Other"			372	100
categorie sugg					
Catagoria oage	300000				
ans of Finding Firs	st Job after				
Leaving This Instit				Number	Percent
l it before graduat				215	32
th school's help		Mark Comment		128	19
ough our employmer	nt agency			30	. 4
ind it myself		7		231	34
nt into military se	ervice			40	6
ner				22	3
: yet employed				16 682	2
		1		682	100

ALUMNI EMPLOYMENT INFORMATION (Continued)

ons for Alumni Unemployment ing for job in the field ining more education or training atisfied with previous job and looking r work in another field ekeeping r tion not applicable	Number 11 24 6 17 24 515 597	2 4 1 3 4 86 100
ent Need for Help in Obtaining Yes	<u>N</u>	_
Changing Jobs Number Percent	Number	Percent
ni responses = 660 88 13	572	87
[집 보다 하는 사람들이 나를 하는 것이 되었다. 그 나는 사람들은 사람들이 모르는 사람들이 되었다. 그렇게 되었다. [전문] [전문]		
ALUMNI EDUCATIONAL EXPERIENCES AFTER LEAVING THIS INSTITUTION		
ni Involvement in Training Programs	Number	Percent
enticeship gement trainee	60 17	10 3
rvisory training	12	2
ialized technical training	12	2
r - 이 이 집 10대 전로를 되었다면 사람들이 됐다면 되었는데 아무리 있는데 하지만 4일이다. 하고 이 없었다.	43	7
, question not applicable	462	_76
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	606	100
s of Alumni Educational Experiences	Number	Percent
ansfer student to a four-year college	43	7
aduate of a four-year institution	4	1
udent in another two-year institution	17	3
udent at this institution	72 413	11 65
	87	13
"그 사람들이 얼마를 다시다면 살아 아니다면 하는데 하는데 하는데 되었다면 없다니다.	636	100
ons for Alumni Loss of Credit		-
an Transferring	Number	Percent
omparable course	11	2
ched fields	2	0
ted on transfer of credits	6 20	1. 5
-year institution would : accept credits	20	
r decept credits	2	0
tion not applicable	444	92
그는 그들은 그리를 살아가지 않아서 가는 이 그는 그는 그 그리고 얼마다 그리지 않아 없었다.	485	100

ALUMNI EDUCATIONAL EXPERIENCES AFTER LEAVING THIS INSTITUTION (Continued)

npa	ri	son	of	Ed	uca	tio	n	Exp	er	ience	2
at	0t	her	Ins	ti	tut	ion	S	wit	h	That	at
hi	s	Inst	itu	ti	on				M		

Jourses taken at other found to be	'institutions
perior to	
ferior to	
really comparable to	

Number	Percent
19	19
38	37
11	11
34	33
102	100

ALUMNI EVALUATION OF INSTITUTIONAL PROGRAMS AND PERSONNEL

portance of Degree or Diploma	Print Day Children Co.	sary for ing Jobs		ary for g Jobs
n Obtaining and Keeping Jobs	Number	Percent	Number	Percent
quired	192	29	168	25
y necessary	157	23	121	18
pful	185	28	201	30
help at all	56	8	94	14
estion not applicable	79 669	12	88 672	13
e: In future surveys refer to course work, not degrees or diplomas.				
of Counseling Staff While	Y	es	No	
lumni Were at This Institution	Number	Percent	Number	Percent
le use of counseling staff after irst quarter (no. of responses = 655)	277	42	378	58
	Y	es	No	
luation of Counseling Given	Number	Percent	Number	Percent
inseling was well directed and ielpful (no. of responses = 412)	379	92	33	8
	Hel	pful	Not H	elpful .
luation of Chairman/Faculty Advisor	Number	Percent	Number	Percent
irman/faculty advisor was no. or responses = 607)	569	94	38	6

ALUMNI EDUCATIONAL EXPERIENCES AFTER LEAVING THIS INSTITUTION (Continued)

ty of Faculty Teaching and		Quali Teac	The second secon		dge of Matter
wledge of Subject Matter	<u>N</u> ı	umber	Percent	Number	Percent
lent		268	43	410	64
그들이 내용을 내 없는데 가겠다면 해 보다스러운 원리 시간에 되었다.		307	49	220	34
		51	8	14	2
		4	0	0	0
		630	100	644	100

ALUMNI INFORMATION ON SEX AND MARITAL STATUS

점점 내 마음 조기의 급경 경우 그리는 것으로 달라고 했다.	Ma	<u>le</u>	Fem	ale
	Number	Percent	Number	Percent
r of respondents = 691	487	71	204	29.
al Status			Number	Percent
e ed			214	32 64
ced			25	4
			671	100

APPENDIX B

FIVE-YEAR ALUMNI STUDY

of

COMMUNITY COLLEGE AND TECHNICAL INSTITUTE STUDENTS 1966-67 to 1970-71

Do not write in this column

Numbers on the sides of the pages refer to card columns for keypunching. They have no meaning in regard to requested answers on the questionnaire. In answering the questions, please follow directions as carefully as possible, completing each question as directed. The information you give will be treated as confidential with answers being used for group analysis. Thank you. PERSONAL INFORMATION Please check and/or change the recorded information and provide the data required. Do not fill in sections reserved for codes. SOCIAL SECURITY: STUDENT IDENTIFICATION # [5], [14] YOUR NAME: [20] (first name) (middle initial) (maiden) Women who married after leaving Male SEX: Female (45)this institution should indicate their maiden names. DATE OF BIRTH: 46 (month) (year) HOME ADDRESS AND PHONE: [51],[66],[78] (street address or route & box#) (city) [5],[8],[13] (code) (phone) (county) (zip) FAMILY INFORMATION: (20),[21] Marital Status: single Number of children: married 2 divorced 3 widowed EDUCATIONAL RECORD: [23],[25] Program completed: CURRENT EMPLOYMENT INFORMATION ON YOUR MAJOR JOB: [29],[54] (name of employer or business) (street address or route & box #) [66][78][5][10] (phone) (code) (city) (state) [17] (title or job classification of present position)

(MORE ON NEXT PAGE)

	UCATIONAL PROGRAM EXPERIENCES PLOYMENT:			Do not write in this column
1.	What is your present employment status? Full-time Job Arrangements One full-time job	2. How necessary was the degree or diploma you received at this institution in regard to obtaining your present, major position? Required1 Very necessary2 Helpful3 No help at all4 Question, not applicable5		(42)
3.	How necessary is your degree or diploma in regard to keeping your present, major position? Required 1 Very necessary 2 Helpful 3 No help at all 4 Question, not applicable 5	4. If you are employed outside your field of preparation, why? Waiting for job in field 1 Did not like field 2 Other 3 Question, not applicable 4		(44) (45)
5.	number (1 - 9) to indicate salaries (1) - \$49 (4) \$150 - \$199	d below and then use the appropriate related to your present major position. (7) \$300 - \$349 Beginning (8) \$350 - \$399 Salary (9) \$400 - Current Salary	5.	(46) (47)
6.	In connection with your present major position, if you are currently involved in a formal training program, please indicate the type of program. Apprenticeship program 1 Management trainee pro- 2 gram Supervisory training 3 program Specialized technical 4 training Other: 5 None/Question, not 6 applicable	7. If you work at a second job, is it related to your training at this institution? Yes 1 No 2 None/Question, not 3 applicable		(48) (49)

	How did you find your first job after completing your educational experience at this institution? Had it before graduation 1	9. If not presently employed, why are you out of work? Waiting for job in the1 field	Do not write in this column
,	With school's help 2 Through an employment 3 agency	Obtaining more education 2 or training Dissatisfied with pre 3 vious job and looking	8. (50)
	Found it myself 4 Went into military ser 5 vice 6 Not yet employed 7	for work in another field Housekeeping4 Other5 Question, not applicable6	9. (51)
10.	Do you wish to have help at this time in obtaining or in changing jobs? Yes 1 No 2	11. Indicate the average number of employment hours spent per week while you attended this institution. Less than 10 1 10 - 19 2 20 - 29 3	10. (52) 11. (53)
	TITIONAL EDUCATIONAL EXPERIENCES	30 - 39 4 40 or more 5	
1.	Your educational experience since co		a. (54)
	a. A transfer student to a1 four-year college or university*	d. A student at this insti1 tution	b. (55) c. (56)
	four-year college or university* b. A graduate of a four- year institution*		c• (56) d• (57) e• (58)
	four-year college or university* b. A graduate of a four- 1 year institution* c. A student in another 1 two-year institution* *List additional educational experi	tution e. None	c. (56) d. (57) e. (58) f. (59)
2.	four-year college or university* b. A graduate of a four- 1 year institution* c. A student in another 1 two-year institution* *List additional educational experi	tution e. None	c. (56) d. (57) e. (58) f. (59) [60][66][68][70 [72][78][5][7]

4.	While enrolled in this institution, did you use the services of the counseling staff after the first quarter? Yes No	given well directed and helpful? Yes 1 No 2	
6.	Your department chairman/fac- ulty advisor was Not helpful Helpful	evaluate the faculty (1) Excel- Knowledge of	6. (21) 7. (22) (23)
8.	If you lost credit by transfe the reason for the credit los No comparable course Switched fields Limit on transfer of credits	Four-year institution 4 would not accept credits Other 5 Question, not applicable 6	8. (24)
CONTRACTOR OF THE PARTY OF THE	this institution to your frie	ogram you completed, would you recommend	(25)
EVA	What courses in your program b Subject Re 1. 1. 2. 2.	Asons Asons Association and the control of the co	1. [26]
2.	What specific subjects did you Subject Re 1. 1.	Asons (codes)	2. [31] 3. [36] 2. 1. [41] 2. [46]
	3.		3. [51]

THANK YOU FOR COMPLETING THIS QUESTIONMAIRE.

PLEASE PLACE THIS FORM IN THE SELF-ADDRESSED, STAMPED ENVELOPE AND RETURN IT. THANKS AGAIN!