THE RELATIONSHIP BETWEEN ARTICULATED CREDITS AND STUDENT PERFORMANCE OF GRADUATES OF A COMMUNITY COLLEGE OFFICE SYSTEMS TECHNOLOGY PROGRAM

by

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Abstract

This research was designed to determine the relationship between articulated credits and performance of graduates in the Office Systems Technology program at Mountain Empire Community College. Specifically, the study was designed to examine student performance as measured by curricular grade point average (GPA) and the number of articulated credits and other selected explanatory variables, including age, marital status, high school GPA, math placement scores, English placement scores, and reading placement scores. The subjects for the study were 134 females, predominantly white, with less than 1% of other races, who were graduates of the Office Systems Technology program at Mountain Empire Community College for the 1989-1992 academic years. Data for the study were gathered from the College's Admission's Office and the Data Processing Center, the 1990 Census Bureau records, and the Virginia Employment Commission. The analytical tools were descriptive statistics and regression analysis. Descriptive statistics were used to describe the population of the service

area from which the subjects were drawn as well as the subjects of the study. The study was correlational in nature, using standardized regression to examine the relationship between a series of independent variables, including articulated credits, and student curricular GPA performance. It was also predictive in nature, using metric regression to provide formulas for estimating the dependent variable, curricular GPA. The standardized regression results revealed that with the exception of articulated credits, each explanatory variable was significantly related to curricular GPA. The metric regression results revealed that as each explanatory variable increased, the curricular GPA increased, excluding articulated credits that virtually remained the same.

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Chapter 1

Introduction

Educators have the responsibility to prepare skilled entry-level workers to provide a quality workforce for the rapidly changing global economy. Thus, a need exists for technical education that provides skills that help graduates become gainfully employed. Linking high school studies with community college courses and programs is one way to meet this need. Those transitional programs can help students progress from one level to another.

As a result, colleges and high schools are actively developing educational models that link their curricula and provide smooth transition from one level to another. According to Roth (1991), this transition can be accomplished through Tech Prep, which is "an articulated sequence of courses at both secondary and postsecondary levels that prepare students for technical careers or careers with technical demands" (p. 1).

The Perkins Vocational and Applied Technology Act, Sec. 342(4), in the Congressional Record (1990) states that Congress finds that "the establishment of systematic technical education articulation agreements between secondary schools and postsecondary institutions are necessary for providing youth with skills in the liberal and practical arts and in basic academics, including instruction in the

English language, and with the intense technical preparation necessary for finding a position in a changing workplace" (p. 789).

Articulation, as defined by Con and Hardy (1978), is a process, attitude, and goal.

> "As a **process**, it is the coordination of policies and practices among sectors of the education system to produce a smooth flow of students from one sector to another. As an **attitude**, it is exemplified by the willingness of educators in all sectors to work together to transcend the individual and institutional self-interest that impedes the maximum development of the student. As a **goal**, it is the creation of an educational system without artificial divisions, so that the whole educational period becomes one unbroken flow, which varies in speed for each individual, and which eliminates loss of credit, delays, and unnecessary duplication of effort" (p. 69).

The process of curricular articulation provides a clear, direct connection between high school and college. Since future jobs will require education beyond high school, educational programs need to be designed to benefit students, schools, colleges, and employers. These programs, built around articulation, need to be structured and closely coordinated, including careful review and revision.

Current community college articulation programs are generally based on advanced placement that eliminates unnecessary duplication of course work, facilitates more advanced training, and allows graduates to complete the programs with higher-level skills. Through articulation, community college credits are awarded for high school work without further testing, requiring only high school teacher/counselor verification of competencies. The effectiveness of this type of articulation needs to be examined to determine the validity of awarding college credit based solely on the articulation agreement.

Background

The community college, Mountain Empire Community College (MECC), used for this study is one of the twenty-three colleges in the Virginia Community College System which operates under the policies of the State Board for Community Colleges and the Local Advisory Board. Within the educational community, MECC provides services that help to ensure that all individuals in the service area are given the opportunity to continue the development of competencies and knowledge through programs that are financially and geographically accessible.

As part of this commitment to quality education, the business technology faculty has strived to provide a professional and beneficial program to area high

school business students. One component of this effort has been the establishment of a cooperative venture between the two educational systems. Its purpose is to broaden and enhance the college-level program by offering articulated college credit for high school work.

On October 30, 1986, the chairman of the Division of Business Technology at MECC applied to the Vocational and Adult Education Division of the Virginia Department of Education for funds to support articulation activities for the academic year 1986-87. The activities included developing a proposal for the purpose of formalizing an articulation agreement between the local school systems and MECC.

The objectives of the proposal included:

1. Faculty of school systems and MECC meeting to plan and to develop curriculum.

2. After consultations, MECC faculty to draft articulation agreements for respective programs.

3. Formal articulation agreements to be signed.

4. Brochure to be designed and printed for students in local school systems, outlining agreement details.

Approval for the articulation agreement was granted in November 26, 1986, by the Administrative Director, Vocational and Adult Education, Virginia Department of Education. On February 11, 1987, MECC representatives met with vocational directors and administrators from the school divisions. They worked together to outline the procedures for developing articulation agreements. At that time, it was decided that representatives from each business program area in each school division would meet and develop a competency checklist to be transferred along with the student's high school transcript to the College (Appendix A) indicating competencies mastered. These lists would be used to grant credit at MECC. Table 1 presents the following guidelines for awarding credit for high school course completion based on semester hour credits:

Table 1

Articulated Credits Awarded for College Courses by Equated Completion of High School Courses

High School Course(s)	College Course(s)
Data Processing I and II	Introduction to Computer Information Systems (3 cr.)
Keyboarding Applications	Typewriting I (3 cr.)
Office Systems and Information/ Word Processing or Office Specialist I and II	Typewriting II (3 cr.)
Office Systems, Information/ Word Processing, and Management Information Systems or Office Specialist I and II	Filing and Records Management (3 cr.)
Office Systems, Information/ Word Processing, and Management Information Systems or Office Specialist I and II	Office Systems and Procedures I (3 cr.)
Shorthand	Shorthand I (3 cr.)

On May 6, 1987, the vocational directors and administrators from the schools met with MECC personnel to finalize and approve the final draft of the competency checklists. Thus, the formal articulation agreement in effect at MECC in the Business Technology Division was initiated in fall 1987 (Appendix B). To receive advanced credit under this agreement, a student was required to request that the high school business teacher/counselor fill out an application indicating grades in specific courses and skill levels where appropriate (Appendix C). The completed form was returned to MECC for evaluation by the Office Systems Technology faculty. The student then completed an application for advanced credit (Appendix D) before any credit was awarded.

Statement of the Problem

Implementing the mandates of the Carl Perkins Act regarding articulation entails a constant process of evaluation and revision. Each stage in the process depends upon analysis of several factors, one of which is student performance. Change is difficult to achieve if the outcomes are not assessed and evaluated in the context of the proposed changes.

Therefore, the emphasis on student performance provides an opportunity for educators to study articulation and its subsequent effect on student

performance. In addition, the focus on preparing students for the workforce of a global economy has provided educators with the opportunity to improve student performance through the use of new approaches, one of which is the awarding of articulated credits. Thus, the data obtained from the study of articulation and their effect on student performance will be of benefit to teachers, students, and employers when they can clearly understand what articulation is and its role in preparing students.

The only study found that addressed the relationship between articulation and student performance was the Schoenbeck study (1993). The current study adds to the research of articulation and provides data that decision-makers can use to better understand articulation in terms of student performance. A research base is needed that provides insight into articulation and its implications in making educational policy decisions.

Purpose of the Study

The purpose of this study was to examine the relationship between articulated credits and performance of graduates in the Office Systems Technology program at Mountain Empire Community College. Specifically, the study was designed to examine student performance as measured by curricular

GPA and the number of articulated credits and other selected explanatory variables.

Significance of the Study

The study provides a quantifiable base for determining if students who receive articulated credits earn a curricular GPA equivalent to students who do not receive articulated credits. Outcomes serve as an indicator of the effectiveness of the articulation agreement. They provide direction for the tech-prep initiative which is coordinated between local high schools and the MECC Office Systems Technology program.

Limitations of the Study

Since this study was an **ex post facto** study, it was limited by lack of randomization, manipulation of the independent variables, and control. This study was further limited by the researcher not being able to determine the validity of placing students in advanced courses based solely on the results of the articulation agreement. Naturally, these limitations affect the generalizability of the study to other populations as the data collection was limited to a specific population in one

community college. Generalization to other populations can be made only to the extent individuals in other populations resemble the population used in this study.

Definition of Terms

Articulation - a process for coordinating the linking of two or more educational systems within a community to help students make a smooth transition from one level to another without experiencing delays, duplication of courses or loss of credit (Hull, 1991).

Articulation agreement - a systematic technical education agreement between secondary and postsecondary institutions which may include advanced placement (time-shortened program) or an advanced skills program.

Articulated credits - credits ranging from 3-18 hours awarded to qualified entering freshmen at MECC based on the high school courses completed and validated by the high school teachers/counselors.

Credit - measure of completion of equated knowledge, skills, and ability in a particular course or subject area, measured in semester hours, where 1 semester hour represents approximately 15 classroom hours.

Curricular grade point average (GPA) - grade point average based on only those courses required in the curriculum in Office Systems Technology at MECC.

English placement score - score based on the results of a college diagnostic test to determine writing skills and preparation to verify student's preparedness for placement in developmental English or college-level English.

Grade point average - average determined by dividing the total number of grade points earned in courses by the total number of credits attempted.

Math placement score - score based on the results of a college diagnostic test to determine math ability in mathematical skills and preparation to verify students's academic preparedness for placement in developmental math or college-level math.

Office Systems Technology - an associate degree program at MECC that provides instruction in the many areas required for competent performance in an office position.

Reading placement score - score based on the results of a college diagnostic test (Assessment and Placement Services for Community Colleges) to determine reading skills and preparation to verify student's academic preparedness for placement in developmental reading or college-level English.

Service region - the geographical area from which the subjects were drawn, including four counties and one city.

Typewriting - term used at the time of the current study to refer to the introductory course in the use of a keyboard; the term was changed to keyboarding in 1994.

Summary

The Office Systems Technology faculty at MECC are committed to curricula coordination with the secondary schools in the service area. These efforts facilitate the process of establishing articulated courses and programs tailored to meet the needs of students and employers. This is an evolutionary process that requires review and revision. In addition, evaluation of student performance at the community college level is needed to compare articulated students' performance to other students. The results of this study can be used to improve the articulation process for courses and programs.

Chapter 2

Literature Review

The literature review includes definitions of articulation at the high school/college level, purposes of articulation, and approaches to articulation. The remainder of the literature review is dedicated to previous prediction studies that deal with the variables that were considered in this study.

Definitions of Articulation

The literature reveals several definitions of articulation and the ways in which articulation is being used by colleges and high schools to develop educational models that link curricula and provide smooth transition from one level to another. Thus, the following section gives an insight into the definition of articulation, its purpose, and the different approaches to its use in education.

Kirkbride, Reynolds, and Hinson (1986) at the State Council for Higher Education in Virginia Conference commented:

> Articulation is the process by which these alliances (high school/community college) are developed. The term 'articulation' means to smooth the path from high school to community college by evaluating prior learning and eliminating the need to repeat previously learned material. If a student has successfully completed a related occupational

program in high school, and has developed beginning level competencies, it is a waste of time, money and human resources to have to repeat the introductory elements (p. 1).

An expanded definition was offered by Farland and Anderson (1988) as: "A planned process linking two or more educational systems together to help students make a smooth transition from one level to another. In an instructional context, articulation is a systematic process which permits students to move from one course or program level to another without experiencing delay or duplication of learning. In an administrative and student services context, articulation is a program of activities which help students successfully make the transition into the college environment" (p. B-3).

Although the definitions may differ in context, the principle is the same: to provide students with an educational program that is relevant and designed to help them meet their needs and to provide a viable link between high school and college. Mendoza (1994) in a study to examine perceptions of Washington state leaders regarding the articulation of technical degrees within the state higher education system found that the technical college presidents were most agreeable to the concept that students moving from one educational level to another should

not be required to repeat skills already mastered. Results similar to this one can be utilized in developing programs that will attract better prepared students.

Purposes of Articulation

Educators continue to pay attention to the purposes of education, and this requires contant evaluation of current plans and programs to ensure that graduates are prepared to enter the workforce. Included in this evaluation is articulation. Clearly defined purposes are essential if articulation is to be evaluated.

Mabry (1988) in an article dealing with the high school/community college connection reported:

> Declining community college enrollments, low test scores and high school dropout rates in secondary schools, and a workforce that lacks the necessary skills for burgeoning high tech industries have all contributed to a growing recognition among community college leaders that they must not only actively recruit high school students, but also collaborate with high schools to prepare students to succeed in college (p. 48). The coordination of high school and community college programs so that students can progress from one level to the next without wasting time, effort, or expense requires cooperation, ongoing negotiations, and often written articulation agreements (p. 50). Articulated educational programs

> require a high degree of institutional commitment and broad-based involvement (p. 51).

Alexander (1996) stated that two major issues in higher education include quality of education and the adequate preparation of graduates for entry into the workforce. Thus, community colleges can play a significant role in addressing issues of access and preparation for work, but it is essential that the colleges maintain well-developed articulated agreements with secondary schools.

Further, Day (1996) remarked that community colleges have taken a leadership role in workforce training by providing articulated learning experiences between high schools and higher education. Therefore, community colleges are emerging as the major, potential providers of workforce training.

Thus, one purpose of articulation is to help meet the employment needs of a highly technical society. Brueder and Martin, in an article in the Community and Junior College Journal (Dec.-Jan., 1985-86), presented the two-plus-two program that is being used at Williamsport Community College in Williamsport, Pennsylvania. They stated:

> Forging relationships with secondary schools, while not new, has become an important priority for community, technical, and junior colleges across the nation. Technical preparation has begun to receive the attention of

> educators at both levels. The need to supply the nation's industries with trained technicians, coupled with the technical emphasis of so many two-year institutions, makes such liaisons increasingly popular. The colleges can meet this challenge by establishing better articulated programs with the high schools so that students can assume their academic responsibilities sooner and acquire a complete set of marketable skills for their first job search (p. 32).

The need for secondary/ postsecondary alliances becomes even more apparent when one examines the current status of American secondary education.

> Parnell (1984) reported that thirty percent of all students do not graduate from high school. Currently thirty-nine percent of high school students are enrolled in a general curriculum that offers virtually no preparation for the world of work. Of the twenty-seven percent of the students who enroll in vocational programs, only one percent specialize in the technical area. Yet only twenty-five percent of community colleges currently maintain relationships with feeder schools that could lead to the improvement of education on both sides of the twelfth year (p. 32).

Thus, Just and Adams (1997) revealed that articulation is designed to create a partnership between high schools, colleges, and business and industry in

order to promote a seamless transition from one educational experience to another (p. 29). Collaboration among schools, colleges, and business and industry is the key ingredient in developing successful articulation programs.

Another purpose of articulation is to provide college credit for courses successfully completed in high school. In a self-study completed by the Gavilan Joint Community College District (1984) in Gilroy, California, the authors reported:

> Articulation has always been an important function of community colleges. Students coming from high schools and other educational experiences must have their previously earned credits honored, for proper placement in courses which follow in appropriate sequence to meet students' goals. Historically, very little attention has been paid by community college officials and faculty to the high school level of articulation (p. 4).

In addition, articulation should provide for smooth transition from one educational setting to another. Dallas (1982) reported that "More and more programs are being developed to strengthen the academic preparation of incoming students and to facilitate the transition from high school to college. One goal of these programs is to develop closer program articulation" (p. 1).

Kintzer (1997) commented that articulation programs will have to adapt to new student populations, the growth of business-sponsored training programs, new technologies, and declining funding. Furthermore, community colleges play a significant role in linking lower and higher education; and these institutions are instrumental in the horizontal and vertical transfer of students.

Approaches to Articulation

There are two major approaches to articulation: Advanced Placement Program (Time-Shortened Program) and the Advanced Skills Program. The National Center for Research in Vocational Education (1986) listed the characteristics of each approach as follows:

Advanced Placement Program (Time-Shortened Program) - eliminates unnecessary redundancy; grants advanced placement in postsecondary programs; and student completes postsecondary program in less time.

Advanced Skills Program - eliminates unnecessary redundancy; adds more advanced training (high-technology emphasis); and student completes postsecondary programs with higher-level skills.

The most commonly used approach is the Advanced Placement Program (Time-Shortened Program); however, some authors suggest that there are combinations of the two that are acceptable alternatives.

Van Patten and Dennison (1987) said that linkages between high schools and community colleges fall into the areas of dual or joint enrollment or advanced placement programs. "In advanced placement programs, students receive college credit or are placed into advanced courses on the basis of the completion of selected high school courses or based on their scores on tests of prior learning" (p. 1).

Furthermore, Black (1988) defined one type of articulation program as time shortened, which is "awarding of advanced placement at the postsecondary level for competencies acquired in high school. Students receive college credit when their competencies equate to those to be achieved in an articulated, introductory college course" (p. 4).

The previous section defined articulation, its purposes, and the different approaches to the application of articulation. Although the focus of this study was concerned with the effects of articulated credits on student performance, other variables were used to predict student performance. Thus, the following section is devoted to similar studies that considered one or more of the same variables.

Relevant Previous Research

Although little specific research was found dealing with the focus of this particular study, the following studies provide insight into prediction of student

performance by using one or more of the same variables that were used in this study. Much diversity exists in the type of research completed and the type and number of variables used; however, the research indicates that there are specific variables that affect student performance to a greater degree than others. Therefore, the particular studies cited here focused on those that have been found to be of significance.

Schoenbeck (1993) completed a research study of 62 Office Technology students in "The Office Technology/Accounting Project" who received credit for 176 courses articulated at the Northeast Wisconsin Technical College--Green Bay and Marinette campuses--for three academic years (1989-90, 1990-91, 1991-92). Each of the 62 students was sent a survey and release form. The form evaluated attitudes, while a release form allowed NWTC to evaluate the "follow-up" courses on transcripts (a follow-up course was defined as a second-level course taken by an articulated student after the first-level course was completed in high school). Fifty students returned the forms. Of that number, 23 had taken at least one follow-up course and 27 had not.

Z-scores were calculated within each of the three areas (typewriting, word processing, and speedwriting) to determine if there was a statistically significant difference in the class performance of students receiving articulated credits and

those who did not receive articulated credits. The results of Schoenbeck's study indicated that in the three subject areas addressed, the only statistically significant difference in the performance of students' receiving articulated credits was in word processing. In addition, t-tests revealed that there was no significant difference between the students' performance in speedwriting and typewriting. In the area of word processing, the t-test revealed that students receiving articulated credits performed better than the students who received no articulated credits at a probability level of .01. The t-test performed on all subject areas revealed that there was not a significant difference in the performance of the groups.

The data suggested, however, that articulation agreements "encouraged students to continue their education, saved tuition, and reduced time needed to acquire a degree by minimizing course duplication" (p. 23). These are goals of a viable articulation agreement.

Other research relevant to this study included variables that affected student performance. One such study by Taube and Taube (1990) was designed to determine which pre-enrollment and post-enrollment factors significantly predict initial as well as subsequent achievement of technical postsecondary students who are predominantly nontraditional. The sample consisted of 127 subjects, all full-time and evening students at an accredited two-year technical college in

Louisiana. The students were enrolled in eight different programs (e.g., office specialist, electronic technology, computer programming, drafting, etc.). "Of the pre-enrollment factors, the findings indicate that race, gender, diploma type, student aspirations of expected GPA, and entrance exam scores are significant predictors of initial achievement. Of the post-enrollment factors, only the number of absences significantly predicted achievement" (p. 99). One positive finding was that the cumulative entrance exam score, which measures both mathematics and reading ability, was a significant predictor of initial achievement. This finding implies that a standardized achievement test may be a reliable entry screening and placement mechanism.

The study by Taube and Taube provided insight into the current study since the researcher collected data on entrance test scores and how they can predict student performance. Thus Taubes' findings provide support for using entrance test scores to predict performance.

Another prediction study was completed by Reyes (1974) which included research on 300 Associate of Arts graduates from San Jose City College in San Jose, California, from 1972 to 1974. The analysis included eleven independent variables (ethnic background, sex, marital status, high school graduate, day or evening status, major, age, Davis Reading test scores, Cooperative Mathematics

test scores, number of years to graduate, and location of high school attended); the criterion variable was grade point average. Multiple regression analysis and analysis of variance were computed. Variables found to be correlated significantly to grade point average were: sex, transfer and vocational-technical majors, age, number of years to graduate, and location of high school attended. Variables found not significantly related to grade point average were: ethnic background, marital status, high school graduate, day or evening status, Davis Reading scores and Cooperative Mathematics scores.

Reyes' study provides findings that are somewhat different from the other studies since entrance test scores did not significantly relate to student performance. However, another variable, age, was significantly related to grade point average; older students maintained higher grade point averages. This finding provided insight into the current study because age is one of the variables considered.

Similar variables were studied in a research report by Harris and Hansson (1985) from the Cosummes River College Office of Research on Assessment Testing: Analysis and Predictions. The researchers gathered data to show how the assessment test scores related to student persistence and performance. The study included a sample of 498 students who were tested by the college

Assessment Center during spring and fall 1985. Test scores consisted of both reading and English scores with subscores in vocabulary and comprehension for reading and spelling, reference skills, and grammar for the English component. All scores were from the Stanford Test of Academic Skills (TASK). In addition, the student's reading grade level, reading placement, English grade level, and English placement were recorded. Data were also gathered on age, sex, ethnicity, high school, length of time since high school graduation, goals for attending college, and projected current time of attendance. Mean test scores and analysis of variance were calculated for the sample.

The one variable that was related to the current study was age. The data revealed that only three variables are significantly different among the age groups: reading comprehension, reference skills, and total English scores. Reading comprehension scores decreased with age, as did reference skills. The pattern for English scores were similar, except for a slight upward trend after the age of 50. The regression analyses provided some indication that assessment test scores can be used as predictors for student performance (Harris & Hanson, 1985).

The results of this study imply age is related to performance and that assessment test scores can be used to predict student performance (Harris &

Hanson, 1985). Therefore, this study supported the results of other studies dealing with prediction variables and provided further support for the current study.

A paper presented by Thornell and Jones (1992) also examined the value of assessment tests as predictors of academic performance in college. This study centered on the value of the ACT and secondary school performance as predictors. The sample, 100 entering freshmen at a small state university in Mississippi, was randomly selected from a population of 585 students. Results indicated a significant correlation between high school rank and GPA as well as between ACT and GPA. However, in this study, secondary school performance was a better predictor than ACT.

The research also indicated that assessment scores can be used as a predictor of student performance as well as secondary school performance. The Thornell and Jones study provided further foundation for the current study because both of these variables were used as predictors of student performance.

Chernault (1996) in a study of the factors related to student achievement in two Virginia community colleges found that one of the significant predictors of college program achievement was high school GPA. The findings of this study further support the use of high school GPA as variable in the current study.

A study by House (1994) investigating the strength of noncognitive variables and academic background for the prediction of college grade performance and persistence revealed that the combination of ACT composite scores and high school class rank alone explained 26% of the variance in college GPA after one year and 26.5% after two years. Gerardi (1996) provided a descriptive analysis of factors that contributed to graduation at a technical college, one of which was assessment scores. He cited significant positive correlations between assessment scores and graduation. These findings provide additional data for incorporating in the current study the use of assessment test scores and high school performance to predict student achievement.

Lanni (1997) in a longitudinal study of factors associated with student success at a large Eastern community college found that two of the predictor variables were age and assessment scores. Although this study focused on American black students, the results can be used to provide additional information to support the use of these two predictor variables in the current study.

Another study by Taube and Taube (1991) analyzed the factors related to achievement and attrition at a proprietary technical school. The data were collected from all entering students regarding student personal characteristics and student achievment. These variables included age, race or ethnic status, sex,

marital status, dependent children, and hours of work. Results of the study indicated that females, whites, and older students tend to have higher first quarter GPA's than other students. Age, therefore, was correlated with higher achievement scores. Additionally, results indicated that high school GPA is a good predictor of achievement.

These two outcomes are relevant to the current study because age and high school grades were used as predictor variables for student performance. Thus, the influence of personal and environmental factors on student performance were further assessed in the current study.

In an assessment research project completed by Boese and Sheppard (1990), the researchers examined the relationship of academic success to basic skills, educational background, and demographic characteristics of 1,381 students from a community college in California. Based on the statistical results of mutiple regression analysis, the findings relevant to the current study indicated that age is a significant predictor of cumulative GPA; older students, on average, have higher GPA's. The study also revealed that English and reading test scores and recommended placement levels are significant predictors of cumulative GPA.

Therefore, the findings provided a foundation for the variables that were used in this study. Additionally, these results are a reflection of the type of

assessment components that can provide further insight into student performance on a national level.

Summary

In this chapter, the literature review included definitions of articulation, purposes of articulation, and approaches to articulation. In addition, a review of literature relating to articulation and prediction studies was presented. Although there are volumes of articles and reports on articulation, the literature review was limited regarding the study of articulation and its relationship to student performance. The relationship between previous research and the variables identified in this study were noted and ramifications for the present study were suggested.

This information provided feedback on the influence of certain student variables to guide educational institutions in the development of curriculum and instruction most applicable for their student population. This can be accomplished by investigating the student characteristics that relate to student performance. With an understanding of the characteristics that contribute to student performance and that demonstrate certain patterns, educators can evaluate the effectiveness of providing articulated credits. Alexander (1996) asserted that community colleges can play a significant role in confronting issues of access and

preparation for work, but it is fundamental that they maintain well-developed articulation agreements.

The next chapter discusses the methodologies used in this study. This discussion includes the different types of research statistics used to analyze the data. The discussion begins with a presentation of the demographics of the population and service area of the college that was used in this study.

Chapter 3

Methodology

This chapter consists of a description of the demographics of the service area of the college used in this study; research methodology; and a description of the subjects, the educational program, and the variables. In addition, there is a description of the research design, methods of data collection, and methods used to analyze the data.

Demographics of the Service Area of the College

The community college for this study is located in rural Southwest Virginia, an area that is economically dependent on the coal industry. The following discussion is based on the 1990 U. S. population census data. The population is predominantly white with less than one percent African-American or other races. The college serves a population base of approximately 109,140 citizens, see Figure 1. The median age of the population of the service area was 35.4, which is higher than the state average of 32.7, see Figure 2. Data were not available on age for one county in the service area.

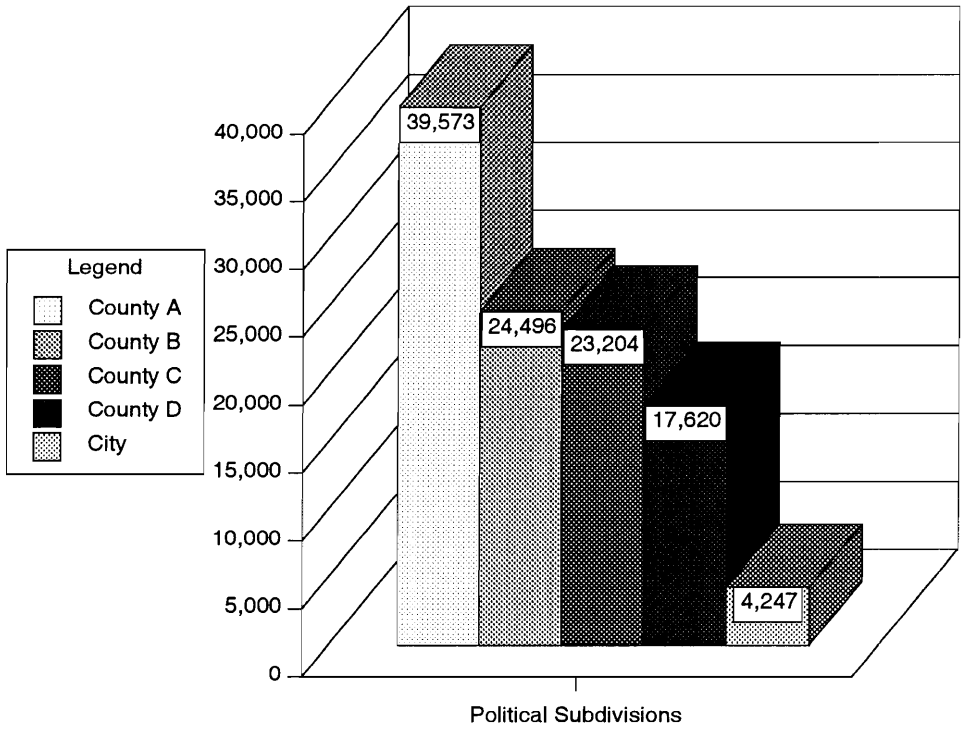

Figure 1. Population of counties and city in the service area.

Source: 1990 U.S. Census

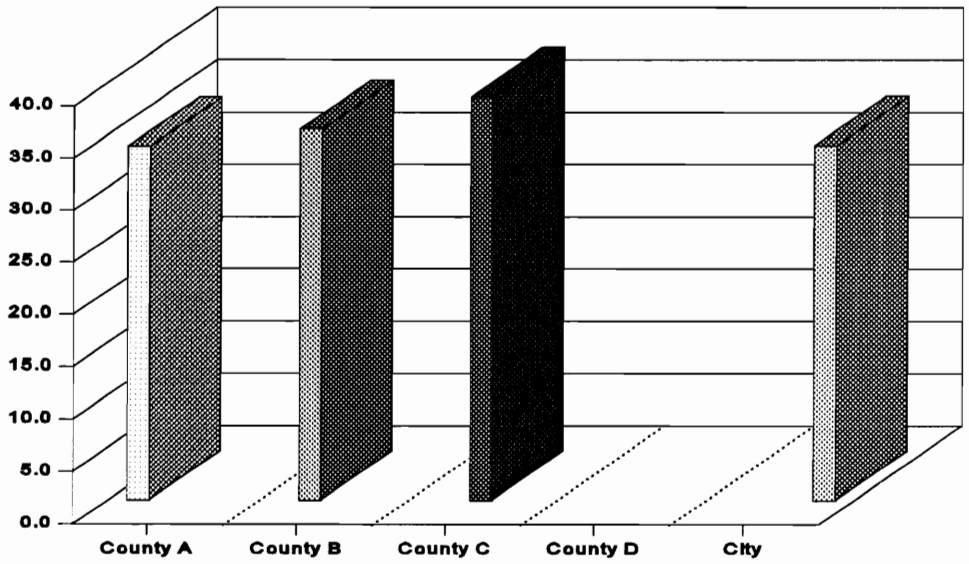

Figure 2. Median age of the population in the service area.

Source: 1990 U.S. Census

The following data related to education levels were obtained from the 1990 U.S. Census Bureau report on citizens 25 years old and older. Approximately 30% of the population had less than a ninth grade education; the state average is approximately 11%. More than 19% had completed ninth grade or higher but had not received a high school diploma, which is higher than the state average of 13.7%. Approximately 27.7% of the population had received a high school diploma as the highest level of education, which is slightly higher than the state average of 26.6%. An average, 12.5% of the population had some college education, compared to 18.5% at the state level. Approximately 4.5% of the population had earned an associate degree while the percentage is 5.5% average for the state. An average of 4.9% of the population had received a bachelor's degree, and an average of 2.6% had received a graduate degree, compared to the state averages of 15.4% and 9.1%, respectively, see Figure 3. Figure 4 represents the educational level for the State of Virginia. A comparison between Figures 3 and 4 indicates that the educational level of the population in the service area is much lower than that of the state.

The average income for the population of the college's service area is $16,862, which is considerably below the state average of $33,328, see Figure 5. Of the population in the service area, 24.8% fall below the poverty line, while

10.2% at the state level, see Figure 6. The average unemployment rate for the service area is 9.76 which is much higher that the state average of 5.0, see Figure 7.

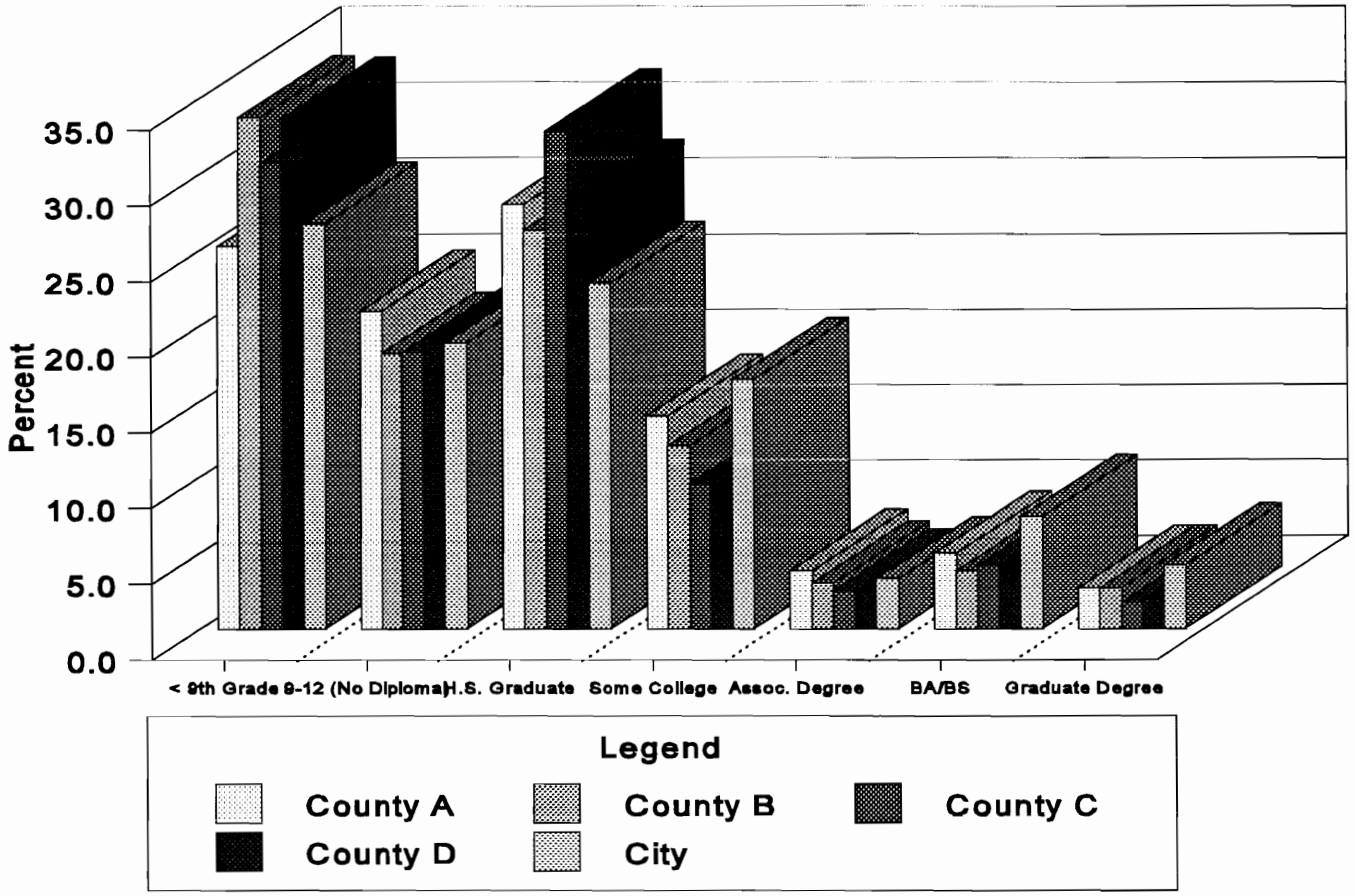

Figure 3: Educational level of the population in the service area.

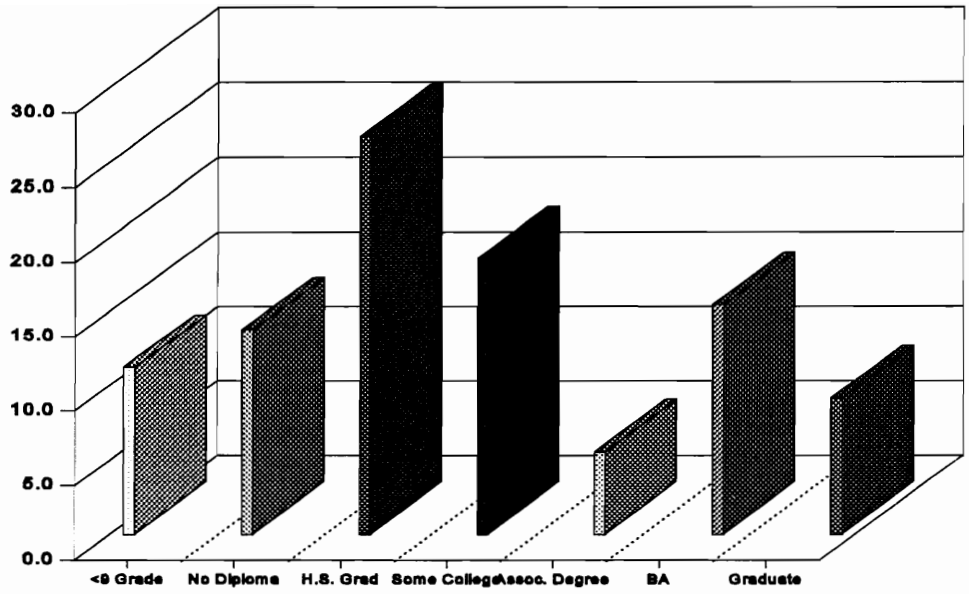

Figure 4: Educational level for the State of Virginia.

Source: 1990 U.S. Census

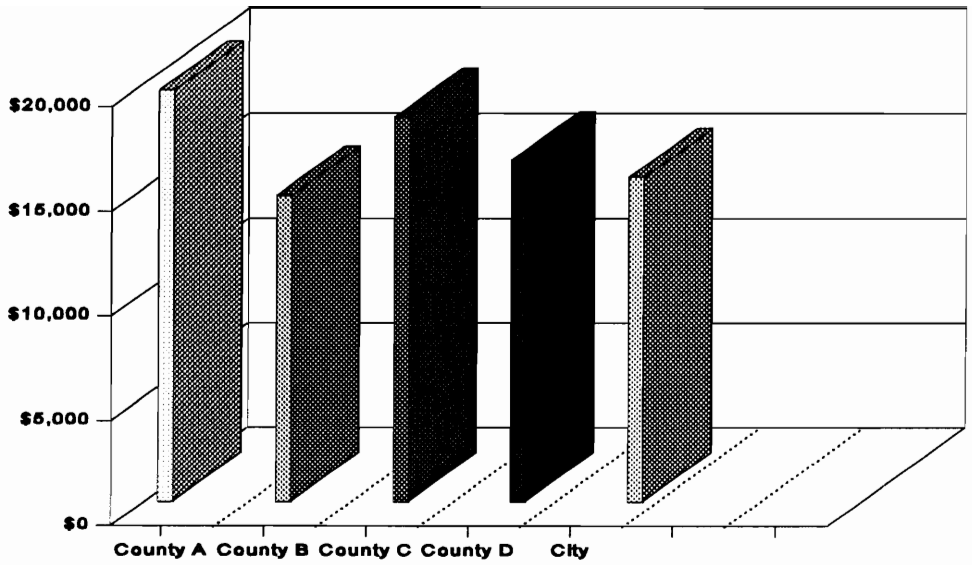

Figure 5: Income level of the service area of the college.

Source: 1990 U.S. Census

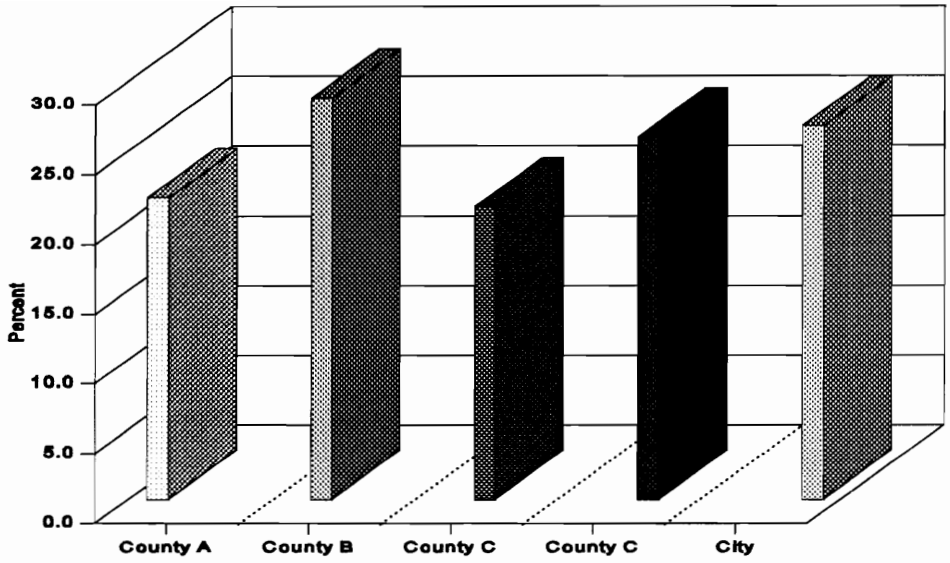

Figure 6: Poverty level of the population of the service area

Source: 1990 U.S. Census

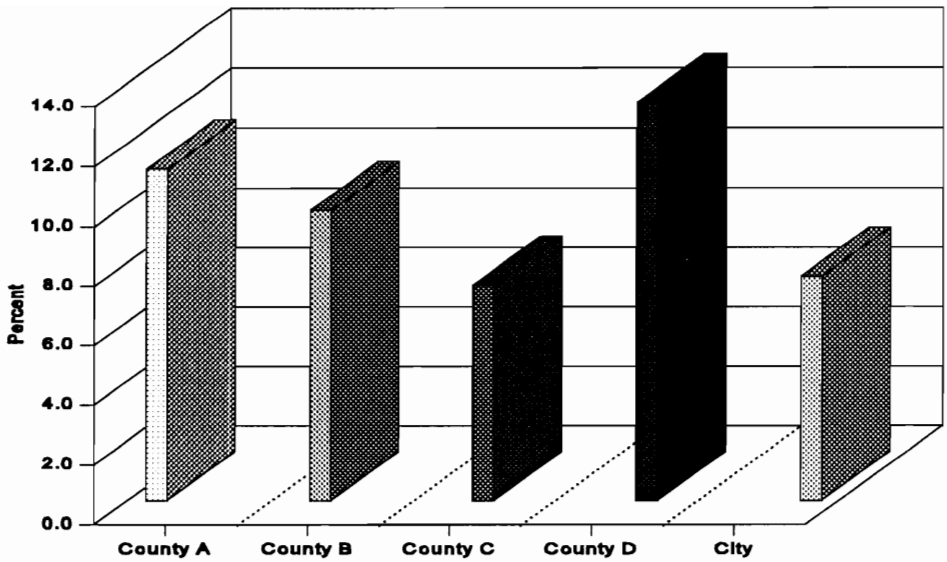

Figure 7: Unemployment level of the population of the service area.

Source: 1990 U.S. Census

Description of the Subjects

The subjects for this study were the graduates of the two-year, associate degree Office Systems Technology program at Mountain Empire Community College. There were 134 female subjects, approximately 99% white and less than 1% other races, in the study (40 subjects received articulated credits) for the 1989, 1990, 1991, and 1992 academic years. These subjects are from the service area of the college which includes the surrounding four counties and one city school which is located in one of the counties. The graduates either attended or were graduates from the eighteen high schools from the four-county area or were residents of the service area.

Description of the Education Program

The Office Systems Technology major is an associate degree program that required the completion of 69 credits to graduate from MECC. The credits included courses in typewriting, filing, word processing, machine transcription, shorthand, office procedures, and general education courses (at least 15 percent of the total credits taken), and electives. This major had two specializations: Administrative Assistant and Executive Secretary; the Executive Secretary specialization required shorthand, the Administrative Assistant program did not (Appendices E and F). In the Administrative Assistant specialization, the student

was required to take BUS 135, Administrative Office Management and OFT 236, Word Processing Operation & System Operation; whereas, in the Executive Secretary Specialization, the student was required to take three semesters of shorthand: OFT 121, Shorthand I; OFT 122, Shorthand II; and OFT 221, Advanced Shorthand and Transcription. All other courses in the two programs were the same. The Associate in Applied Science degree in Office Systems Technology was designed to prepare the student for employment in office occupations.

Description of the Variables

The independent variables that were used included specifically articulated credits and other explanatory variables including student age, marital status, high school grade point average, math placement scores, English placement scores, and reading placement scores. The high school grade point average for the subjects in this study was based on a four-point scale. The student age used was the age at the time of graduation from the program at MECC. The placement testing at MECC incorporated diagnostic testing of student skills used to appropriately place students in college classes. The tests utilized at MECC were provided by the Multiple Assessment Programs and Services (MAPS) program of the college board. The instrument used for testing was Assessment and Placement Services

for Community Colleges. The tests were designed to assess a student's skills in reading, writing and mathematics.

The results of the math placement test were based on a raw score, 1-100. Students who scored below 20 were placed in a developmental math course, Math 02, which was basic math. Placement in Math 02, if diagnosed, was a prerequisite before a student could enroll in Math 121, the required course in the Office Systems Technology program.

The reading and writing diagnostic test results were based on percentiles. Students who scored in the 6-10 range were required to enroll in either Eng 01, Preparing for College Writing I, or Eng 04, Reading Improvement I. If the score was in the 11-20 percentile, the student was required to enroll in either Eng 03, Preparing for College Writing II, or Eng 05, Reading Improvement II. Any score in the range of 21-50 percentile required enrollment in Eng 108, Critical Reading and Study Skills. Any score above the 50 percentile allowed the student to enroll in Eng 111, College Composition I, which was the required course in the Office Systems Technology program at MECC. It should be noted that in evaluating the reading and writing tests both scores were considered when placing a student in the proper course. In fact, the writing sample took precedence over the test score in appropriate course placement.

The only test developed locally was the algebra test. The subjects used in this study were not required to take algebra to complete the two-year program in Office Systems Technology.

Research Design

The design of this study was **ex post facto**. This study was not experimental because no manipulation of the independent variables was undertaken and no control group was used. The analytical tools were descriptive statistics and regression analysis. Descriptive statistics were used to describe the characteristics of the population of the service area as well as the subjects of the study. The study was correlational in nature, using standardized regression to examine the relationship between a series of independent variables, including articulated credits, and student curricular GPA performance. It was also predictive in nature, using metric regression to provide formulas for estimating the dependent variable. The dependent variable was the curricular GPA. The independent variables were students' ages, English placement scores, math placement scores, reading placement scores, marital status, and high school GPA.

Data Collection

A Curriculum Progress Report from each subject in the study was retrieved from the MECC's Admission Office data bank. This report included all courses taken, grades in each course, curriculum choice, placement test results, articulated credits, and GPAs. Other data, including age, high school attended, and marital status were obtained from the Data Processing Center at MECC. High school GPAs were retrieved from the high school transcripts on file in the MECC's Admissions Office. Data related to the demographics of the service area in which the MECC is located were obtained from the 1990 U.S. Census and from the records at the local Virginia Employment Commission.

Methods Used to Analyze the Data

Simple standardized regression was used to examine the relationship between the dependent variable, curricular GPA, and each of the independent variables. Standardized regression was used to determine the contribution of each explanatory variable. In standardizing each explanatory variable, the mean and standard deviation for each were set to zero and one, respectively. The standardized regression coefficients or standardized estimates (β_1) are equivalent to the following quotient $\frac{b_i s_i}{s_0}$, where b_i represents the regression coefficient for the dependent variable, s_i represents the corresponding standard deviation, and s_0

represents the standard deviation for the dependent variable. For every standard deviation change in the explanatory variable, the dependent variable changes by the beta weight times the standard deviation of the dependent variable.

Simple metric regression was used to develop predictive formulas. These formulas could be used to predict curricular GPA based on each of the independent variables.

Summary

This chapter presented the research methodology with a description of the demographics of the service area, the subjects used in the study, the educational program, and the variables. In addition, there was a description of the research design, methods of data collection, and methods used to analyze the data. The description of the demographics of the service area included data on the populaton base, median age of the population, the educational level of the population, the income level, the poverty level, and the unemployment level.

The description of the subjects for the study revealed that there were 134 female subjects, approximately 99% white and less than 1% other races who were graduates of the Office Systems Technology program at MECC for the 1989-1992 academic years. Forty subjects received articulated credits.

The data in this chapter also included a description of the Office Systems Technology program at MECC, with special emphasis on the two program specializations: Administrative Assistant and Executive Secretary. Specifically addressed were the differences in the program.

This chapter identified and described the independent variables used in the study, which included specifically articulated credits, and other variables, including age of subjects, marital status of subjects, high school grade point average of subjects, math place scores, English placement scores, and reading placement scores. Finally, the dependent variable, curricular grade point average, was described.

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This chapter also included a description of the data collection process used for this study. The majority of the data was collected from records in MECC's Admission's Office and the Data Processing Center. Other data were collected from the 1990 U. S. Census and records from the local Virginia Employment Commission.

Finally, the methods used to analyze the data were described. The methods were simple standardized regression and simple metric regression. The next chapter presents the results of the study using these methods.

Chapter 3

Methodology

This chapter consists of a description of the demographics of the service area of the college used in this study; research methodology; and a description of the subjects, the educational program, and the variables. In addition, there is a description of the research design, methods of data collection, and methods used to analyze the data.

Demographics of the Service Area of the College

The community college for this study is located in rural Southwest Virginia, an area that is economically dependent on the coal industry. The following discussion is based on the 1990 U. S. population census data. The population is predominantly white with less than one percent African-American or other races. The college serves a population base of approximately 109,140 citizens, see Figure 1. The median age of the population of the service area was 35.4, which is higher than the state average of 32.7, see Figure 2. Data were not available on age for one county in the service area.

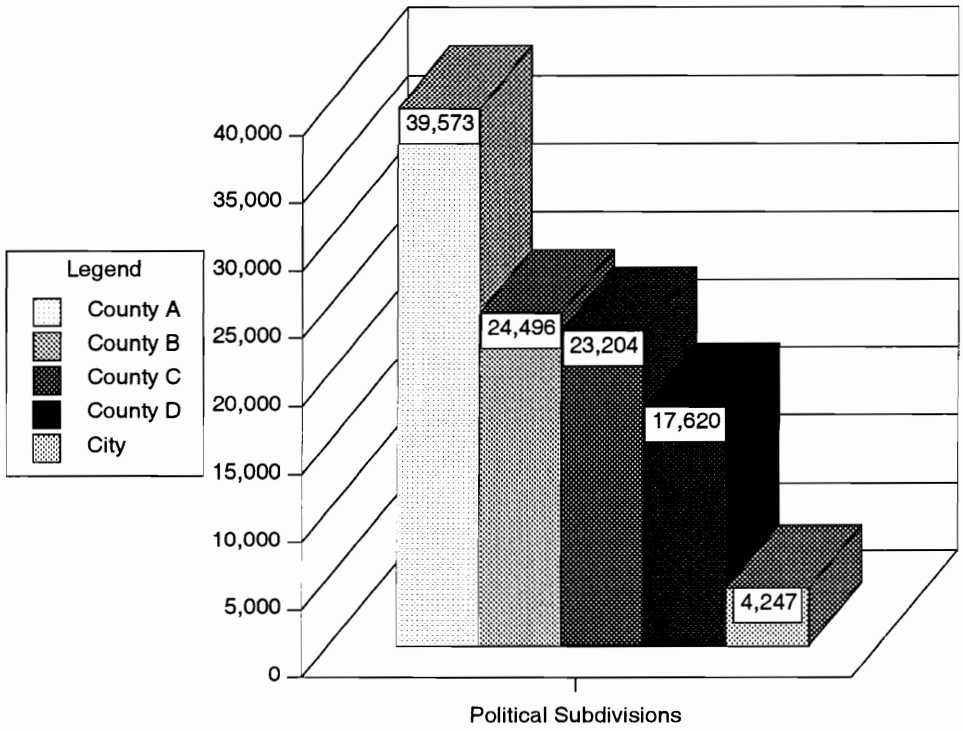

Figure 1. Population of counties and city in the service area.

Source: 1990 U.S. Census

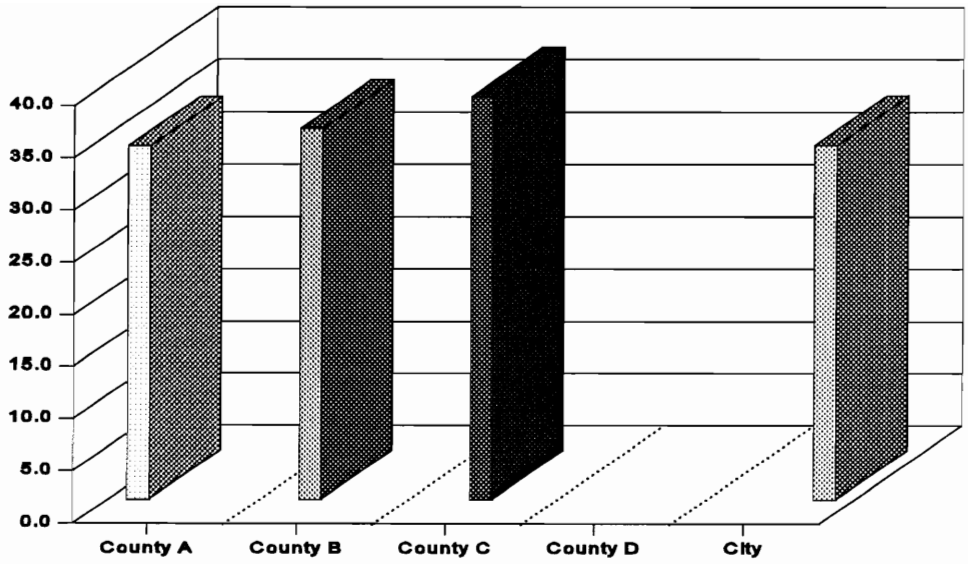

Figure 2. Median age of the population in the service area.

Source: 1990 U.S. Census

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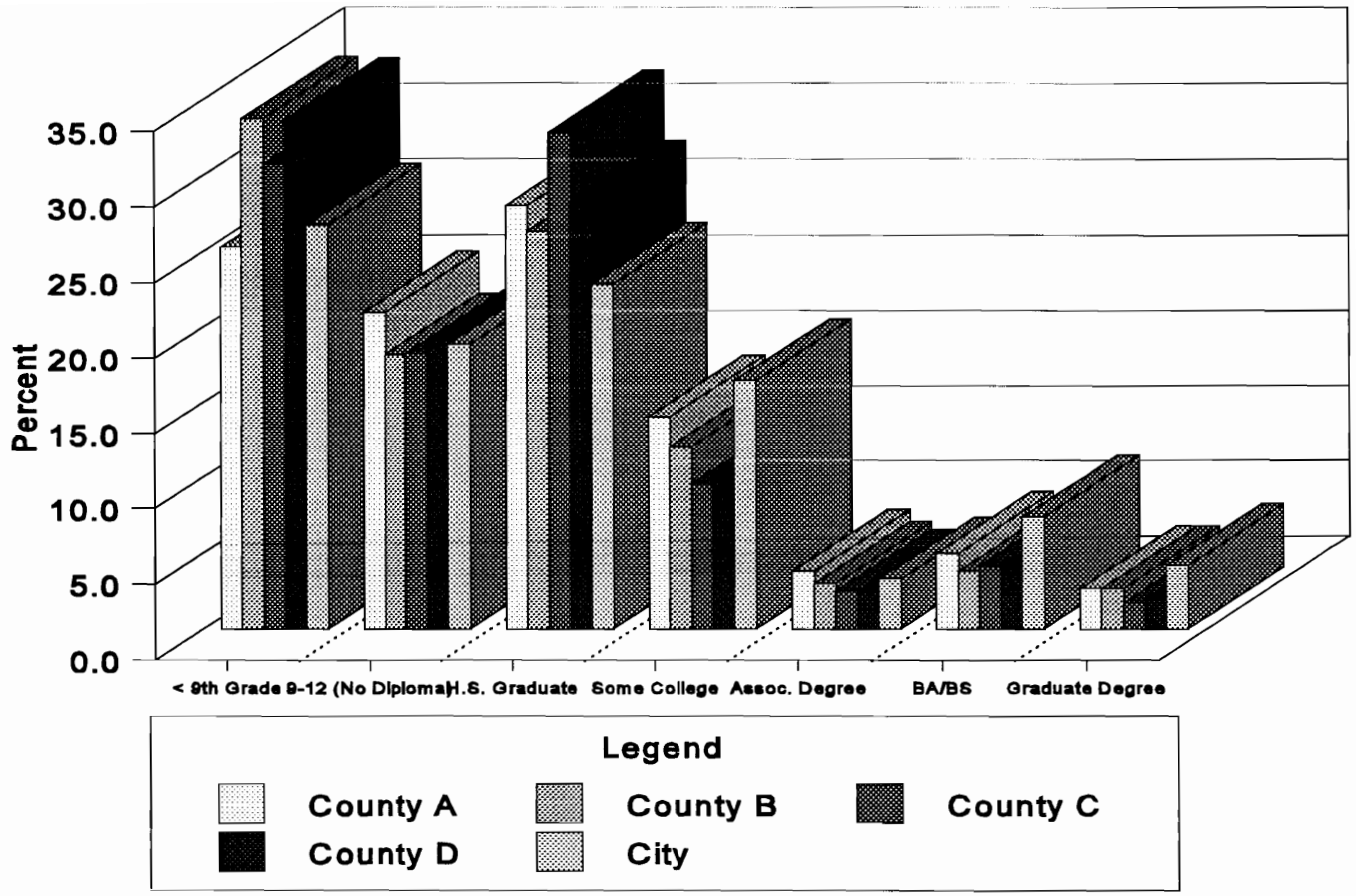


Figure 3: Educational level of the population in the service area.

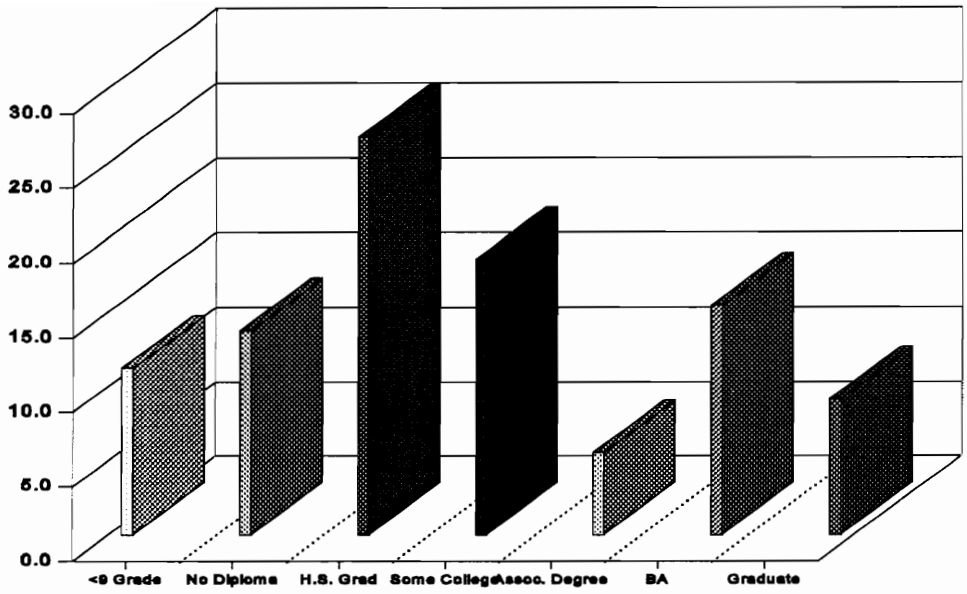
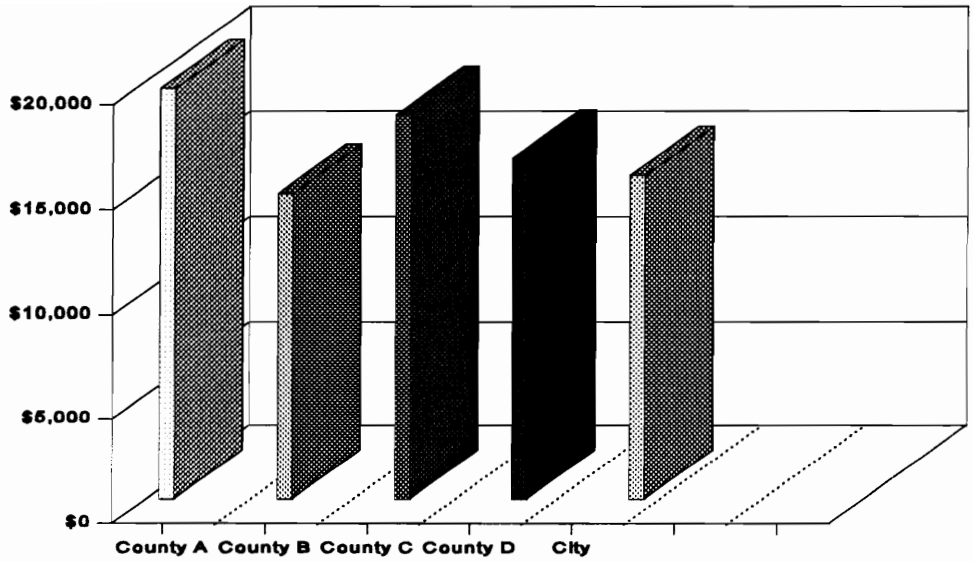


Figure 4: Educational level for the State of Virginia.

Source: 1990 U.S. Census



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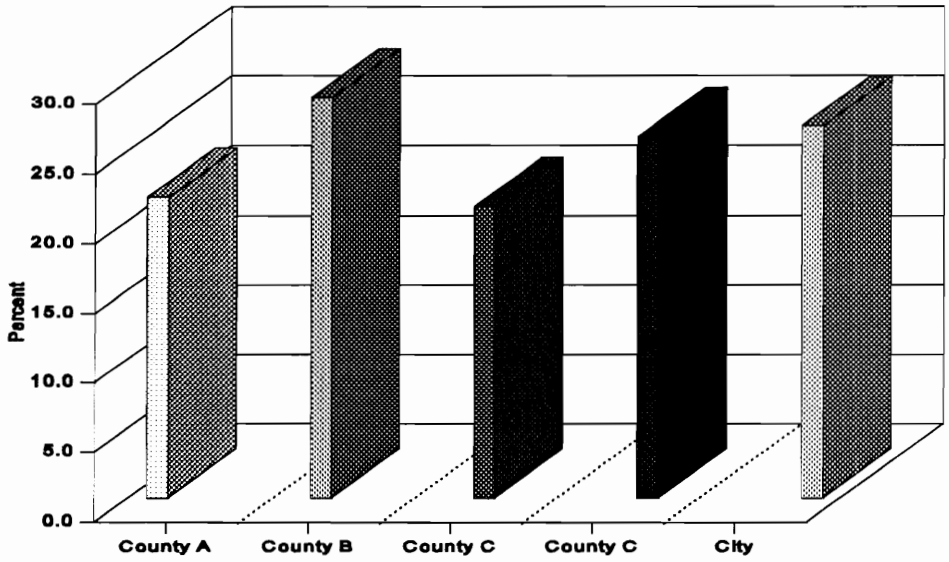
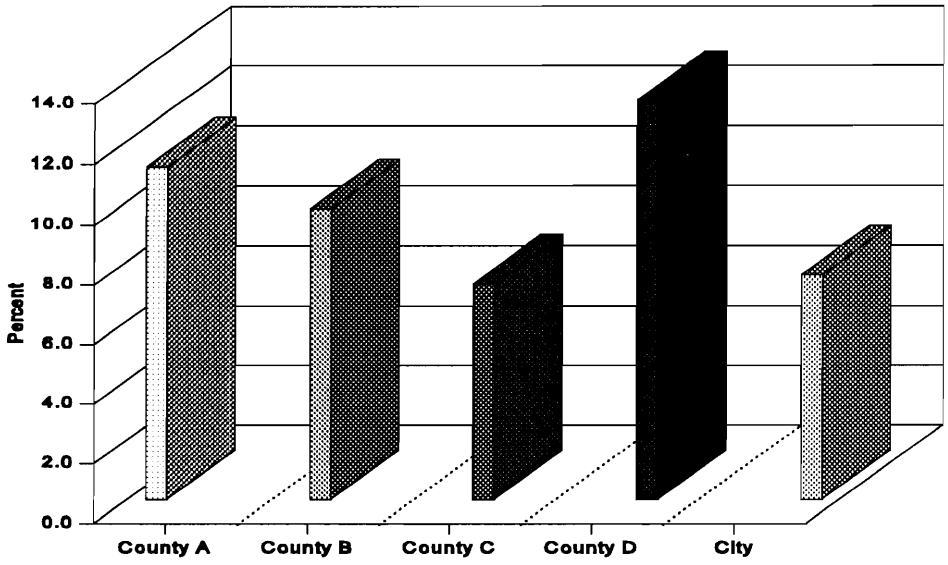


Figure 6: Poverty level of the population of the service area

Source: 1990 U.S. Census



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Simple metric regression was used to develop predictive formulas. These formulas could be used to predict curricular GPA based on each of the independent variables.

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The description of the subjects for the study revealed that there were 134 female subjects, approximately 99% white and less than 1% other races who were graduates of the Office Systems Technology program at MECC for the 1989-1992 academic years. Forty subjects received articulated credits.

The data in this chapter also included a description of the Office Systems Technology program at MECC, with special emphasis on the two program specializations: Administrative Assistant and Executive Secretary. Specifically addressed were the differences in the program.

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This chapter also included a description of the data collection process used for this study. The majority of the data was collected from records in MECC's Admission's Office and the Data Processing Center. Other data were collected from the 1990 U. S. Census and records from the local Virginia Employment Commission.

Finally, the methods used to analyze the data were described. The methods were simple standardized regression and simple metric regression. The next chapter presents the results of the study using these methods.

Chapter 4

Results

This chapter presents the results of the study. It includes the descriptive statistics used to analyze the data regarding the subjects and the variables; individual regression results; and the analysis of the purpose of the study.

Description of Subjects

The subjects studied in this research project were female with approximately 99% white and less than 1% other races and ranged in age from 21 to 59. The mean age was 30.74 and the median age was 29. As shown in Figure 8, approximately 50.6% were over 20 and ≤ 30 years of age; 31.5% were over 30 and ≤ 40; 10.5% were over 40 and ≤ 50; and 7.5% were over 50 and ≤ 60.

Data were available on 59 of the 134 subjects regarding marital status. Approximately 54% were single; 6.8% were either separated or divorced; and 39% were married. Figure 9 compares the marital status of the 59 subjects with data available.

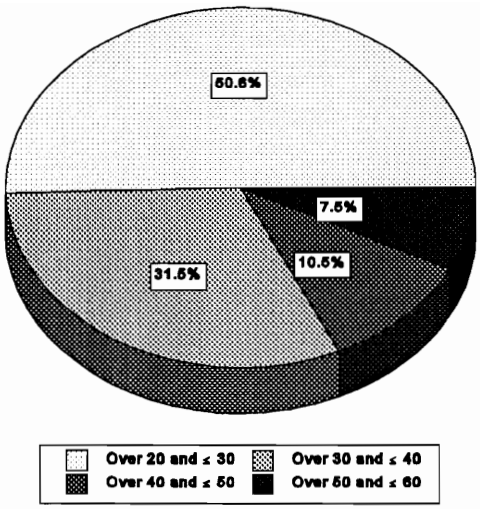

Figure 8: Ages of Subjects of Office Systems Technology graduates at MECC, 1989-1992, (N=134).

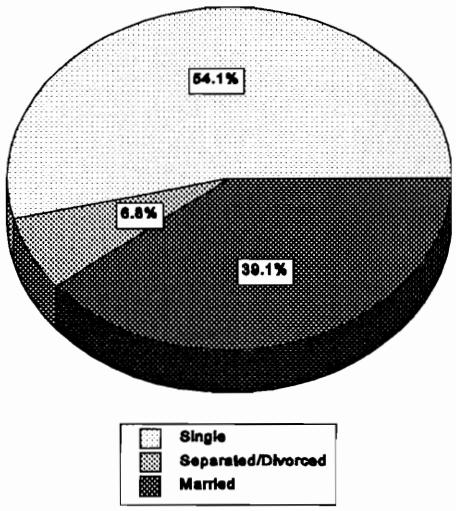

Figure 9: Marital Status of Subjects of Office Systems Technology graduates at MECC, 1989-1992, (N=59).

The high school grade point average was available for 43 of the subjects. The mean average was 2.55 on a 4.0 scale. The median GPA was 2.49. Approximately 4.7% fell below 1.0; 11.6% were over 1.0 and ≤ 2.0; 65.1% were over 2.0 and ≤ 3.0; and 18.6% were over 3.0 and ≤ 4.0. Figure 10 compares GPA for the 43 subjects with GPA data available.

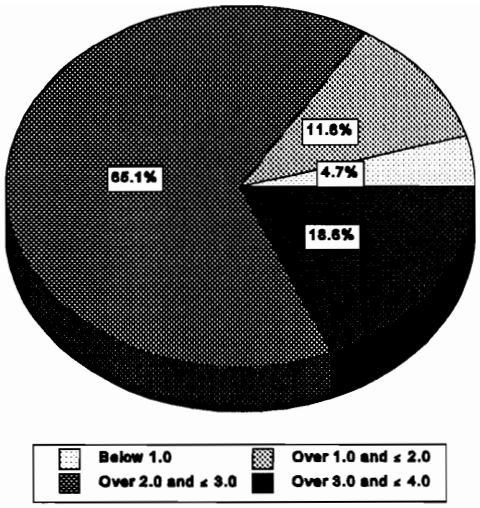

Figure 10: High School GPA of all Office Systems Technology graduates at MECC, 1989-1992, (N=43).

The math placement test scores were available for 53 of the subjects. The scores ranged from 16 to 35. The mean score was 26.49, with a median score of 27. Approximately 15.1% were over 0 and ≤ 20, and 84.9% were over 20 and ≤ 40. Figure 11 compares math placement test scores for the 53 subjects with data available.

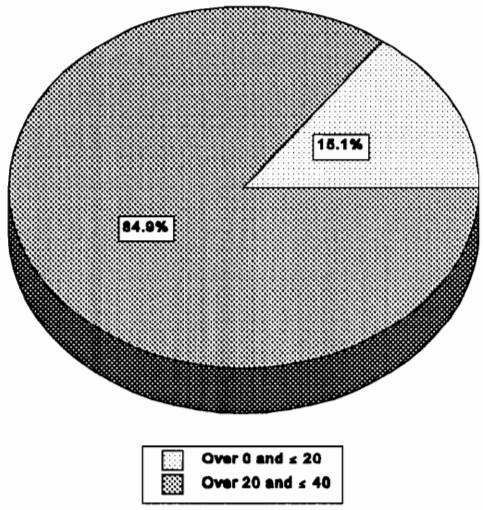

Figure 11: Math Placement Scores of all Office Systems Technology graduates at MECC, 1989-1992, (N=53).

The English placement scores were available for 107 of the subjects. The scores ranged from .05 to 98. The mean score was 52.82, with a median score of 56. Approximately 7.5% were over 0 and ≤ 10; 6.5% were over 10 and ≤ 20; 31.8% were over 20 and ≤ 50; and 54.2% were over 50 and ≤ 100. Figure 12 compares the English placement scores of the 107 subjects with data available.

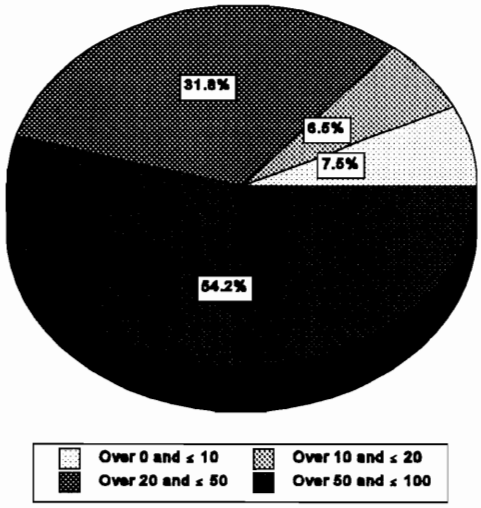

Figure 12: English Placement Scores of all Office Systems Technology graduates at MECC, 1989-1992, (N=107).

Data were available for 107 subjects on reading placement scores. The scores ranged from 1 to 93, with a mean score of 45.40 and a median score of 43. Approximately 5.6% of the scores were over 0 and ≤ 10; 12.2% were over 10 and ≤ 20; 38.3% were over 20 and ≤ 50; and 43.9% were over 50 and ≤ 100. Figure 13 compares the reading placement scores of the 107 subjects with the data available.

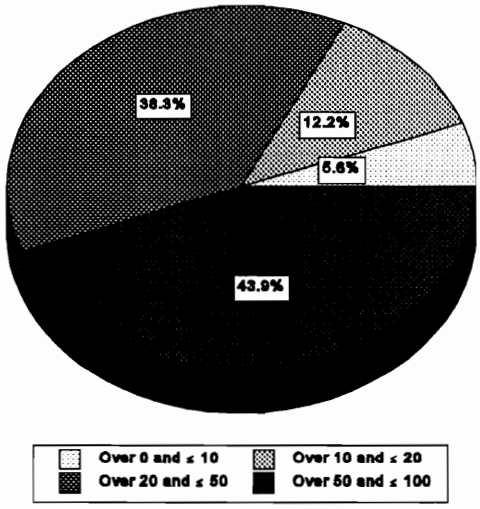

Figure 13: Reading Placement Scores of all Office Systems Technology graduates at MECC, 1989-1992, (N=107).

Forty subjects out of 134 had received articulated credits, ranging from 3 to 18 credits. Approximately 33% received 3 credits; 25% received 6 credits; 10% received 9 credits; 20% received 12 credits; 8% received 15 credits; and 5% received 18 credits, see Figure 14.

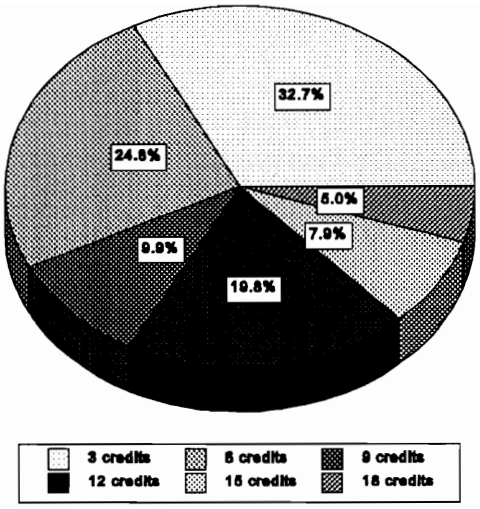

Figure 14: Articulated Credits Received by all Office Systems Technology graduates at MECC, 1989-1992, (N=40).

There were no missing variables for curricular grade point average. The GPA was based on a 4.0 scale. The GPA ranged from 1.97 to 4.0. The mean GPA was 3.38, with a median GPA of 3.5. Approximately 1.5% of the subjects had a GPA of 1.97 and ≤ 2.0; 23.9% over 2.0 and ≤ 3.0; and 74.6% over 3.0 and ≤ 4.0, see Figure 15.

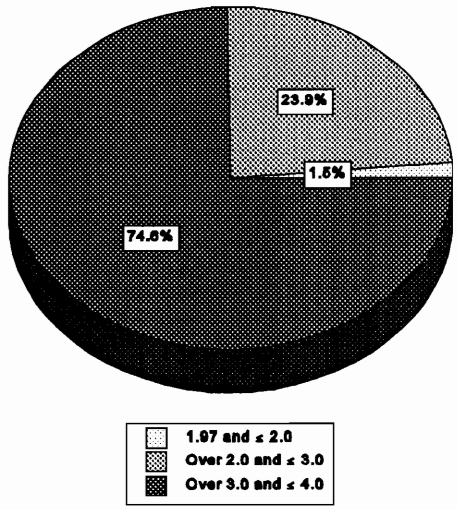

Figure 15: Curricular GPA of all Office Systems Technology graduates at MECC, 1989-1992, (N=134).

Regression Results

The initial plan for the study had been to use multiple regression. When the data were collected, only nine subjects had available data for all the variables. Therefore, simple regressions were used to analyze the relationship of each explanatory variable (x_i) to the dependent variable, curricular GPA (y).

For the standardized regression analysis, Table 2 indicates the degrees of freedom, r^2 values, Beta weights, and probability levels for each explanatory variable. The results revealed that with the exception of articulated credits, each explanatory variable was significantly related to curricular GPA in each respective model. English placement scores, reading placement scores, and marital status explained greater than 20 percent of the variations in curricular GPA within each respective model. In addition to the data from Table 2, Table 3 includes the intercept and metric regression coefficient from each independent regression.

Table 2

Results of Individual Simple Regression Analyses

Explanatory Variable	df	Beta Weights	r^2	Probability
Articulated Credits	39	0.0425	0.0018	0.795
Age	133	0.2638	0.0696	0.002
Math Placement Score	52	0.4339	0.1883	0.001
English Placement Score	106	0.4964	0.2464	0.000
Reading Placement Score	106	0.5115	0.2616	0.000
Marital Status	58	0.4581	0.2099	0.000
High School GPA	42	0.4370	0.1658	0.007

Table 3

Simple Metric Regression Analyses

Explanatory Variable	df	Intercept	Regression Coefficient	r^2	Probability
Articulated	39	3.262	0.005	0.0018	0.795
Age	133	2.856	0.017	0.0696	0.002
Math Placement Score	52	2.342	0.041	0.1883	0.001
English Placement Score	106	2.916	0.009	0.2464	0.000
Reading Placement Score	106	2.932	0.010	0.2616	0.000
Marital Status	58	2.926	0.215	0.2099	0.000
High School GPA	42	2.607	0.290	0.1658	0.007

Figures 16 through 22 shows the metric regression plots for each explanatory variable regressed on curricular GPA. For each figure, the metric regression is indicated by a solid line and the actual observations are indicated by points connected with a dotted line. Figure 16 shows the regression of curricular GPA on articulated credits. As the reader can see, the regression slope is positive, indicating that as age increases, curricular GPA tends to increase.

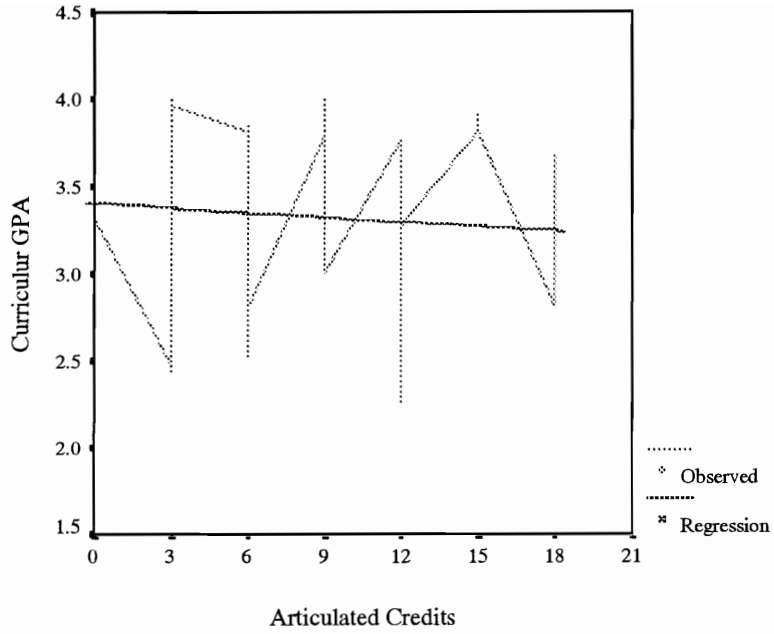

Figure 16. Curricular GPA as a function of articulated credits (N=134).

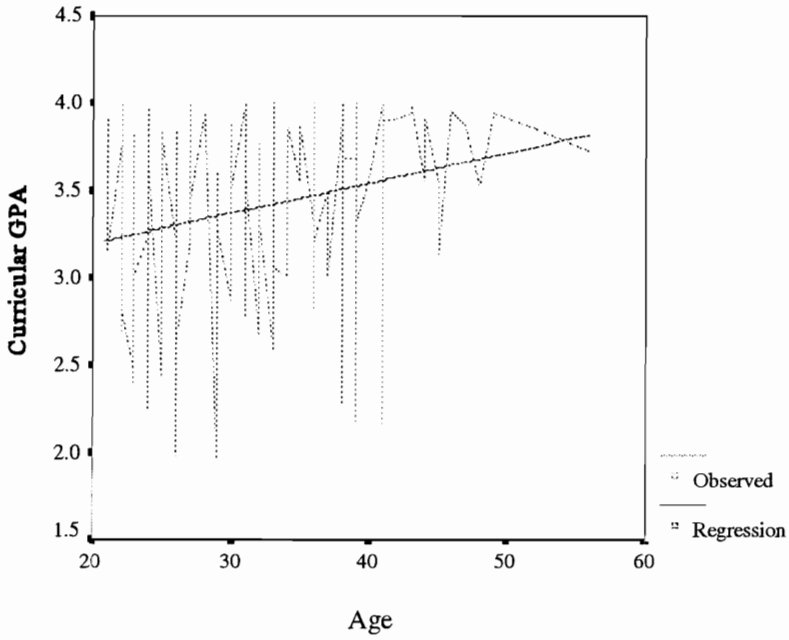

Figure 17. Curricular GPA as a function of age (N=134).

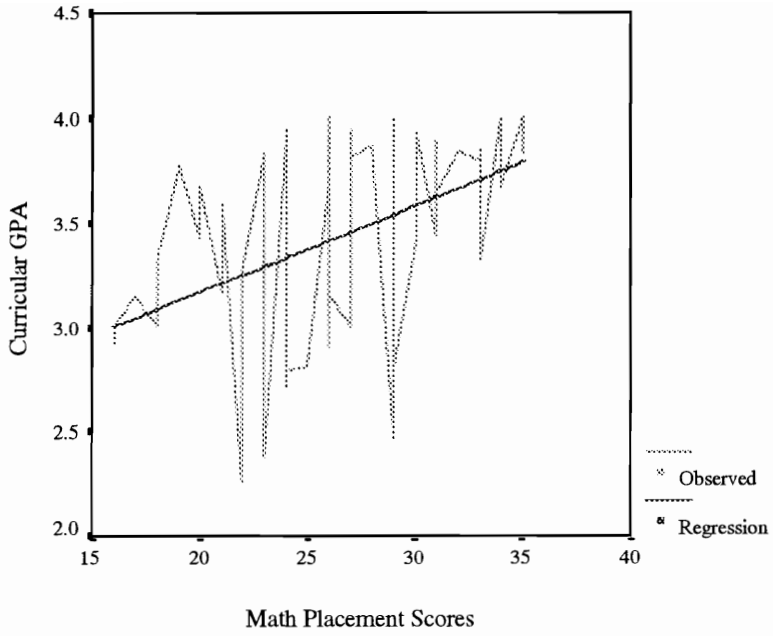

Figure 18. Curricular GPA as a function of math placement scores (N=53).

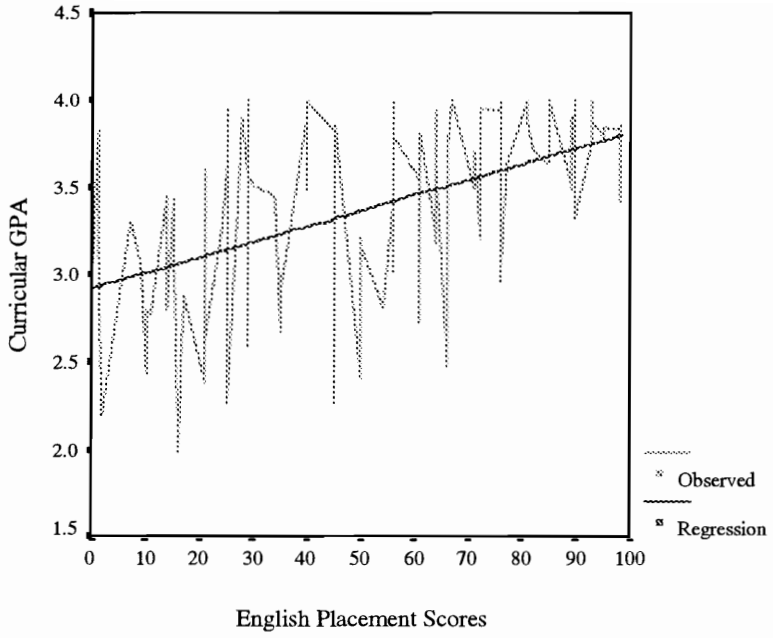

Figure 19. Curricular GPA as a function of English placement scores (N=107).

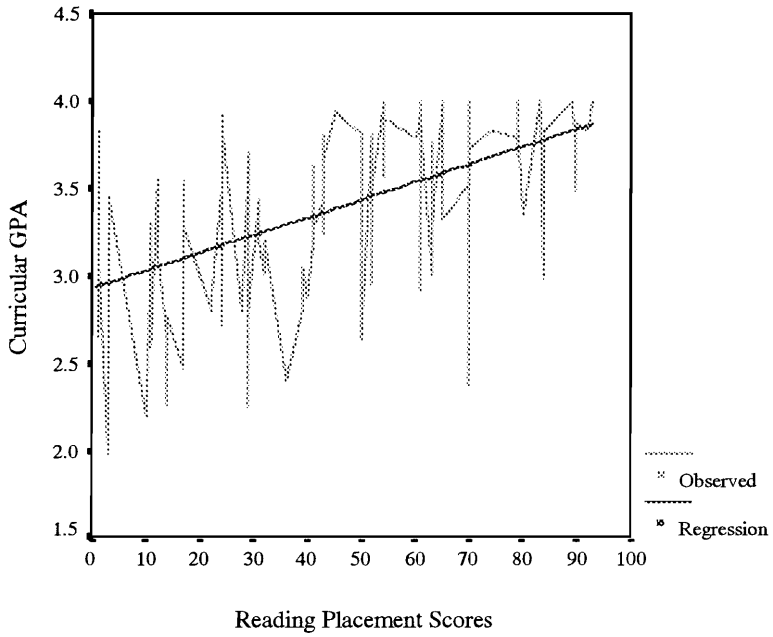

Figure 20. Curricular GPA as a function of reading placement scores (N=107).

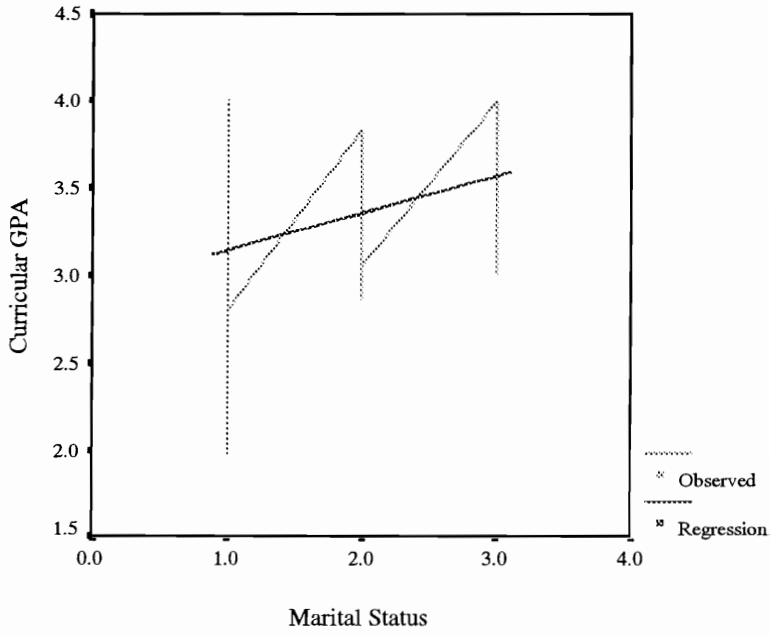

Figure 21. Curricular GPA as a function of marital status (N=55).

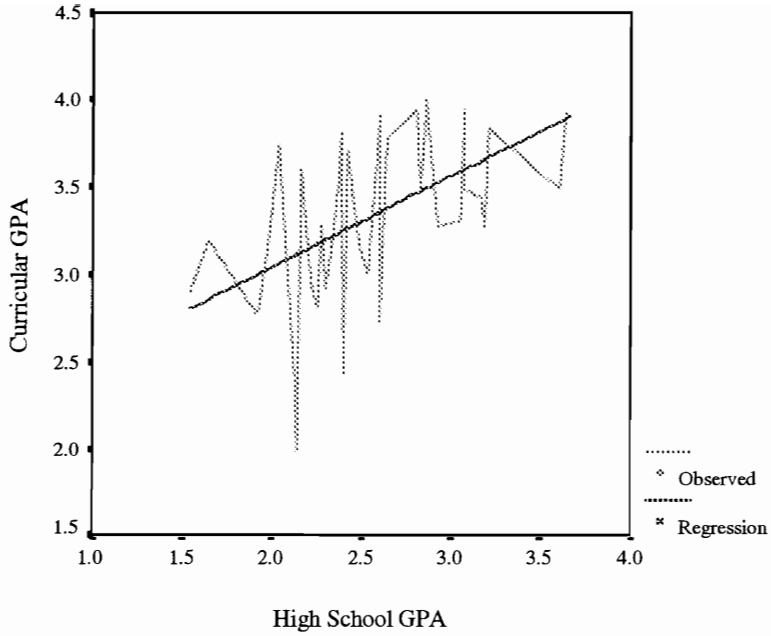

Figure 22. Curricular GPA as a function of high school GPA (N=41).

Summary

This chapter presented outcomes of the statistical analyses used in this study, including descriptive statistics, simple standardized regression analyses, and metric regression analyses. The subjects for the study were 134 white female with less than 1% other races who were graduates of the Office Systems Technology program for 1989, 1990, 1991, and 1992 at Mountain Empire Community College.

As shown in this chapter, descriptive statistics varied from student-to-student. A simple regression analysis was used with each explanatory variable, articulated credits; age; math placement score; English placement score; reading placement score; marital status; and high school GPA, with curricular GPA as the dependent variable. The analyses revealed that there was not a significant relationship between curricular GPA and number of articulated credits received. Married students performed better than single students in curricular GPA. In addition, the analysis regarding math, English, and reading placements tests showed that there was a relationship between each of the dependent variables and curricular GPA. Finally, the results of the analysis of the data indicated that there was a significant relationship between age and curricular GPA.

The following chapter presents the findings, conclusions, and recommendations. In addition, there will be a discussion section.

Chapter 5

Summary, Findings, Conclusions, Recommendations and Discussion

This chapter summarizes the previous chapters. In addition, it includes the findings, conclusions, and recommendations. There is also a separate section for discussion and implications of the results of the study.

Summary

Purpose of the Study

The purpose of this study was to examine the relationship between articulated credits and performance of graduates in the Office Systems Technology program at Mountain Empire Community College. Specifically, the study was designed to examine student performance as measured by curricular GPA related to number of articulated credits and other selected explanatory variables.

Data Collection

Data from high school records and college databases were used in this study that included number of articulated credits received, age, marital status, high school GPA, math placement scores, English placement scores, reading placement scores, and curricular GPA. These data also included information

reported in the 1990 Population Census Bureau regarding the demographics of the service area.

Subjects

The subjects in this study were graduates from the Office Systems Technology associate degree program at Mountain Empire Community College for academic years 1989, 1990, 1991, and 1992. The subjects of the study were 134 females, predominantly white, with less than 1% of other race.

Data Analyses

Simple regression was used to analyze the data because of problems with missing data. In addition, descriptive statistics were used to describe the subjects of the study as well as the population of the service area from which the subjects were drawn.

Summary of the Findings of the Study

The analysis of the data indicated that there was not a significant relationship between curricular GPA and number of articulated credits received. Married students performed better than single students in curricular GPA. In addition, the analysis of the data regarding math, English, and reading placements tests showed that there was a significant, positive relationship between each of the

independent variables and curricular GPA, the higher the test score, the higher the GPA. Finally, the results of the analysis of the data indicated that there was a significant relationship between age and curricular GPA, the older the student, the higher the GPA.

Conclusions

Based on the findings, students who receive articulated credits perform just as well as those students who do not. These results support the Schoenbeck study (1993). Therefore, the awarding of articulated credits is a valid process at Mountain Empire Community College.

Reyes (1974) found that married students perform at a higher level than single students. Another study by Taube and Taube (1990) further supports this conclusion. The current study provided support for that idea.

Analyses for math, English, and reading placement scores indicated significant relationships with curricular GPA. I conclude that the use of the current placement tests to place students in the appropriate level courses appears to be a valid process. This supports the Taube and Taube (1990) and the Harris and Hansson (1985) studies that found entrance exam scores were a significant predictor of achievement. In addition, a paper presented by Thornell and Jones (1992), examining the value of assessment tests as predictors of academic

performance in college, suggested a significant correlation existed between ACT scores and college GPA. The findings of the current study support these results. However, my findings do not support the Reyes (1974) study, which indicated that entrance test scores did not significantly affect grade point average.

Age was significantly and positively related to curricular GPA. As a result of this finding, I conclude that older students appear to have an advantage over younger students according to curricular GPA. This conclusion is consistent with other results in a study by Reyes (1974) and in a research project conducted by Boese and Sheppard (1990) which indicated that age is a significant predictor of cumulative GPA, and that on the average, older students have higher GPAs.

Recommendations

The following recommendations are offered based upon the findings and conclusions of the study and in support of previous research.

The findings of the study indicated that no significant relationship existed between number of articulated credits and curricular GPA. Based on the conclusion that MECC's articulation program is a valid process, the college should continue to maintain and use the articulation program.

Therefore, the college should consider research in other curriculum areas of the college to determine the feasibility of using articulated credits in other programs. Two areas that are of specific interest at this time are English and math.

Another finding of the study indicated that married students performed better than single students. Further study is warranted to determine why married students perform better. Other variables, including socioeconomic factors, should be considered.

One of the findings of the study indicated that older students perform better than younger students as determined by curricular GPA. Therefore, the college should continue to encourage students of all ages to pursue further education at the community college through active recruitment efforts in all segments of the population, not just recent high school graduates.

Based on the findings of this study, the most important recommendation is to replicate the study. In order to provide a scientific base whereby educators can develop relevant educational courses and programs, more studies need to be completed on the variables used in this study.

Discussion

The data collected for this study were for the graduates of the Office Systems Technology program for the 1989-1992 academic years at MECC. Since that time, the program has gone through many changes, including a name change to the Administrative Support Technology program. Many courses in the program have been deleted or revised. In addition, several courses have been updated, and new courses have been added. Consequently, the articulation agreement has changed to reflect program changes at both the high school and community college. However, the articulation process is essentially the same as it was in 1992. The college continues to award college credits for equated high school courses completed in the skills area.

There are several implications for the students, faculty, and the college as a whole as a result of the findings of this study. It seems that students who receive articulated credits have the option of either enrolling in advanced courses at the college or completing the program in less than two years. Faculty have the challenge of maintaining current, up-to-date articulation agreements to ensure that students have the greatest advantage in pursuing college-level work without having to repeat course work already completed at the high school level.

The results of this study were consistent with the Schoenbeck (1993) study providing evidence that the awarding of articulated credits is not related to achievement as measured by curricular GPA. However, this study extended the research on the statistical base regarding other variables that affect student performance such as age, marital status, high school GPA, and entrance tests.

The data in this study were consistent with other studies using one or more of the same variables. The Taube and Taube (1990) study found that entrance exam scores were a significant predictor of initial achievement. Reyes' (1974) found age to be significantly correlated to grade point average. However, Reyes' study found that entrance test scores did not significantly relate to student performance. In the Harris and Hansson (1985) study, the researchers found that both age and assessment test scores can be used to predict student performance. Chernault (1996) found that high school GPA was a significant predictor of college program achievement.

Furthermore, in a study by House (1994), the researcher concluded that assessment scores and high school rank explained better than 25% of the variance in college GPA. Gerardi (1996) found similar results in a study that showed a positive correlation between assessment scores and graduation. Lanni (1997)

further substantiated these findings in the results of his study that found age and assessment were predictors for student success.

Since the data in this study are consistent with other literature in the field, college personnel are presented with a challenge to continue revision and updating of articulation agreements. The college is also challenged with the prospect of incorporating articulation in other program areas that would provide foundation for a future study that included male subjects and well as other races.

The results of this study can be useful for those at the community college level who are involved in the development and implementation of educational programs and courses that meet the needs of a rapidly changing workforce. The findings provide insight into those factors that affect student performance that can be used to validate course/program revision.

Findings from this study offer encouragement and support at the community college by showing that the articulation program is a viable and valid segment of the educational process. In addition, the results provide incentives for community colleges to continue assessment programs and to continue to recruit students from all age groups.

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APPENDIX A

Competency Checklist

OFFICE SYSTEMS (6621)

Suggested Course Competencies and Performance Objectives

Suggested Grade Level: 10, 11, 12 Prerequisite: Keyboarding Applications

Office Systems is a one-year, single-period course with emphasis on the development of word processing applications and office procedures skills. Additional units of instruction include operation of various office equipment, oral and written communications, records and database management, recordkeeping, human relations, information processing, and office careers orientation. Eleventh- and twelfth-grade students taking this course may participate in Cooperative Office Education.

CALCULATING MACHINES AND COMPUTATIONAL SKILLS

1. Perform basic math functions using whole numbers and decimals on an electronic calculator.

   PO Given an electronic calculator and several problems calling for basic math functions using whole numbers and decimals, compute the answers using the touch method with 100 percent accuracy.

2. Perform decimal placement and compute percentages on an electronic calculator.

   PO Given an electronic calculator and several problems involving decimal placement and related percentages, compute the answers and determine the decimal placement with 100 percent accuracy.

COMMUNICATION SKILLS

3. Develop and maintain a vocabulary list.

   PO Given an assignment to keep a personal record of newly acquired business words complete with definitions, develop and maintain a personal word list adding at least five new words each week.

4. Locate and verify information.

   PO Given a writing assignment requiring the use of reference materials, gather information suitable for the purpose, using a dictionary, thesaurus, encyclopedia, and other resources, citing at least five references.

5. Interpret charts, graphs, schematics, illustrations, tables, and other visual aids.

   PO Given charts, graphs, schematics, illustrations, tables, and other visual aids; discussion relevant to the particular topic, and a worksheet, interpret the visual aid by answering questions on the worksheet provided. At least 85 percent of the responses must be correct.

6. Identify and summarize main and subordinate ideas.

   PO Given a newspaper or magazine article of 500 words or less, identify and summarize (orally and/or written) in own words the main and subordinate ideas in the article according to predetermined guidelines.

7. Compose and format a business letter.

   PO Given letterhead stationery and a situation, compose and format an appropriate business letter. The letter must be mailable.

8. Proofread and edit documents for spelling, punctuation, capitalization, word division, abbreviations, number usage, accuracy of content, and clarity of expression.

   PO Given sample letters containing various errors, proofread and edit to produce documents of mailable quality.

9. Develop an outline for a short report.

   PO Given an assignment to write a short report on a topic, brainstorm ideas about that topic; organize, select, and relate those ideas into outline form; and present them according to predetermined guidelines.

10. Make an oral presentation.

    PO Given an assignment to make a three-minute oral presentation, make the presentation before the class demonstrating a controlled voice, speaking correctly, expressing ideas clearly and concisely, and answering questions coherently. A checklist will be used to rate performance. All items must receive an acceptable rating.

11. Participate in the exchange of ideas within small and large groups.

    PO Having been assigned to a discussion group and given a problem, participate in a 10-minute brainstorming session and exchange ideas within the group, comparing the results of this session with those of other groups in the class and meeting the accepted standards for effective group dynamics. A checklist will be used to evaluate the group session. All items must receive an acceptable rating.

12. Apply decision-making techniques to solve problems.

    PO Given a problem and a list of the six steps useful in decision making: (1) identify and define the problem; (2) do any required research, study, or analysis; (3) decide upon three possible solutions to the problem; (4) select what appears to be the best solution; (5) review the tentative decision to assure it is best; (6) prepare a defense for your decision, write or describe orally what takes place in each step completely and accurately.

EMPLOYABILITY SKILLS AND LEADERSHIP DEVELOPMENT

13. Develop a career plan.

    PO Given access to sources of job information and to persons representing local business, post-secondary education, and military service: (1) match work modes with a selected occupation; (2) set career objectives; (3) identify job opportunities, educational requirememts, and skills necessary for advancing in the occupation. This assignment must be presented in a paper of two to three typewritten pages, to include all the factors listed above.

14. Develop a resume (personal data sheet) and letter of application.

    PO Given an advertisement for a job that interests him/her, complete a one-page resume and letter of application for that job, following established guidelines for acceptable resumes and letters of application.

15. Complete a job application form.

    PO Given a job application form, prepare the application with 100 percent accuracy and so applicant is presented favorably.

16. Demonstrate successful interview techniques.

    PO Role-playing an actual job interview situation, the student as interviewee will participate in an interview at least five minutes in length, meeting adopted standards for a successful interview.

17. Compose and produce an interview follow-up letter.

    PO Given a simulated interview for an advertised job, complete an acceptable interview follow-up letter. The letter must be mailable.

18. Identify and exhibit the attitudes and work habits appropriate for work.

    PO (a) Given a list of at least 10 work attitudes and/or work habits that employers value such as accuracy, adaptability, punctuality, reliability, productivity, trustworthiness, orderliness, following directions, integrity, and use of good judgment, check "yes" or "no" column (the one best describing him/herself). Each item must have a response.

    PO (b) Given a class discussion of attitudes and work habits appropriate for work, exhibit those attitudes or work habits in class. Demonstration of attitudes and work habits will be both self- and instructor-evaluated using a checklist. All items must be rated acceptable.

19. Identify the personal traits that can affect human relations.

    PO (a) Given a class discussion of personal traits appropriate for work, exhibit those traits in class. Demonstration of traits will be both self- and instructor-evaluated using a checklist. All items must be rated acceptable.

    PO (b) Given five case problems where an employee is having a human relations problem either with another employee, a customer, or the employer, read and analyze the cases and and indicate (in writing or orally) the type of decision the employee should make in each case in order to solve the problem with at least four of the cases correctly solved.

20. Exhibit good grooming and appropriate attire for work.

    PO Given a role-playing or real office situation and the standards of dress and grooming expected, dress appropriately and demonstrate the essentials of good grooming. All items on a checklist must receive an acceptable rating.

21. Maintain regular and prompt attendance.

    PO Given a class schedule, arrive on time and attend class according to school regulations.

22. Determine priorities in completing work/projects.

    PO Given a description of office activities to be performed in a designated time, prioritize the activities in the order of importance and complete each task using proper procedures and in usable form.

23. Exhibit leadership skills developed through participating in the activities of the Future Business Leaders of America.

    PO (a) Given a list of leadership qualities such as initiative, imagination, independence, individuality, motivates people, inspires confidence, and delegates responsibility, self-rate each quality using this scale: 5=very high, 4=high, 3=average, 2=low, 1=very low. Each item must have a response.

    PO (b) Given an assigned task, demonstrate his/her leadership abilities by accepting responsibility, displaying a positive attitude toward the work, showing pride in his/her accomplishment of the task, and/or working without supervision according to established guidelines.

    NOTE: Suggested leadership activities can be taken from the FBLA Guide as follows:

4.1-4.16	Job-Seeking Skills
4.27-4.39	Human Relation Skills
4.47-4.52	Leadership Training Skills

MAIL PROCESSING

24. Prepare envelopes for mailing.

    PO Given materials, supplies, and ten letters to be prepared for mailing, verify addresses (including zip codes), type the addresses on the envelopes/labels, check for enclosures, fold, properly insert into appropriate envelopes, seal, and determine postage with 100 percent accuracy.

25. Process incoming and outgoing mail.

    PO Given a simulated packet of ten pieces of incoming mail and ten pieces of outgoing mail, sort, open, date, stamp, distribute, and use the mail machine to process those items with 95 percent accuracy.

26. Select appropriate methods and services for mailing items that require special attention.

    PO Given five pieces of mail that require special attention, select appropriate mailing methods and services with 100 percent accuracy.

OFFICE EQUIPMENT, MEDIA, AND SUPPLIES

27. Change paper, ribbons, and elements or print wheels on appropriate equipment.

    PO Given information regarding methods and procedures for maintaining office equipment, change paper, ribbons, and elements or print wheels in appropriate machines demonstrating the proper functioning of the equipment after the changes.

28. Clean keys, elements or print wheels, and remove dust and other particles on appropriate equipment.

    PO Given information regarding methods and procedures for maintaining office equipment, clean keys, elements or print wheels, and remove dust and other particles in appropriate machines demonstrating the proper functioning of the equipment after the changes.

29. Clean and make minor adjustments as directed on reprographic equipment.

    PO Given reprographic equipment and supplies, clean, replace pads (if appropriate), and make minor adjustments as directed demonstrating the proper functioning of the equipment after the changes.

30. Identify the necessity for placing service calls for office equipment.

    PO Given a list of equipment and the reason each item is inoperable, determine those items that require service calls with 90 percent accuracy.

31. Outline the procedures involved in ordering, distributing, and controlling office supplies.

    PO Given instruction and information regarding ordering, distributing, and controlling (labeling and storing) office supplies, outline the procedures involved in ordering, disbributing, and controlling the supplies listing all the major considerations with 90 percent accuracy.

RECEPTIONIST DUTIES

32. Demonstrate how to meet/register/screen office callers, give appropriate information, route within the organization, and take messages.

    PO Given situation involving callers in the office, demonstrate how to register and screen callers, give appropriate information, route callers, and take messages. A checklist will be used to rate performance. All items must receive an acceptable rating.

33. Demonstrate the proper procedures for introducing office guests or callers.

    PO Given role-play situations involving guests and callers in the office, demonstrate the proper procedures for introducing office guests or callers including those with appointments, those without appointments, and irate individuals. A checklist will be used to rate performance. All items must receive an acceptable rating.

34. Plan and schedule an executive's trip, including the preparation of the itinerary and making necessary travel arrangements.

    PO Given a simulation, demonstrate the accomplishment of each of the following items: (a) planned itinerary to avoid back-tracking, (b) planned trip to avoid long layovers, (c) planned sufficient time for engagements, (d) planned times for meals, (e) made travel arrangements considering employer's preferences, (f) made necessary transportation and lodging reservations, (g) confirmed reservations, (h) scheduled meetings where appropriate, and (i) prepared copy of itinerary for employer and office. Complete the assignment with 100 percent accuracy.

35. Prepare a business expense statement.

    PO Given receipts and other information relevant to the employer's business trip, prepare a business expense statement with 100 percent accuracy.

RECORDS MANAGEMENT

36. File documents alphabetically, numerically, geographically, and by subject.

    PO Given 20 documents to be filed alphabetically, 20 documents to be filed numerically, 20 documents to be filed geographically, and 20 documents to be filed by subject, file the documents in the individual folders with no more than five documents misfiled.

37. Retrieve requested documents from files.

    PO Given five requests for retrieval of correspondence and files arranged for alphabetic, numeric, geographic, and subject systems, retrieve at least four of the five requested pieces of correspondence.

38. Prepare cross-reference sheets for selected documents.

    PO Given five indexed pieces of correspondence requiring cross-referencing and cross-reference cards or sheets, cross-reference the correspondence. At least three of the five pieces of correspondence must be cross-referenced correctly.

39. Identify uses of filing equipment and materials, mechanical storage and retrieval, procedures for maintaining/disposing of records, and the use of micrographics, microforms, microfiche, ultrafiche, and electronic filing systems.

    PO Given questions covering the uses of filing materials and equipment (folders, vertical, lateral, labels, guides, rotary), mechanical storage and retrieval, procedures for maintaining/disposing of records, follow-up systems, and the use of micrographics, microforms, microfiche, ultrafiche, and electronic filing systems, provide answers to the questions with at least 90 percent accuracy.

40. Index, code, sort, and file documents using alphabetic and chronological rules.

    PO Given 25 documents, a file (or simulated file) with the guides and folders set up for alphabetic filing, and instruction to apply the basic alphabetic and chronological rules, index, code, sort, and file the documents with 23 of the 25 pieces filed correctly.

REPROGRAPHICS

41. Prepare camera-ready copy for duplication.

    PO Given a document to be altered for photocopying, alter, type, cut, paste, and copy the document producing a photocopy that is usable.

TELECOMMUNICATIONS

42. Answer calls using proper business telephone techniques.

    PO Given a simulated telephone situation involving an incoming call, respond to the ringing telephone meeting the following criteria: (a) answering within two rings; (b) identifying the organization or firm by name; (c) identifying him/herself by name; (d) using proper telephone voice and rules of courtesy as instructed by text or instructor. A checklist will be used to rate performance. All items must receive an acceptable rating.

43. Demonstrate (or outline) the procedure for transferring an incoming telephone call.

    PO Given a simulated telephone situation involving an incoming that must be transferred, respond to the call meeting the following criteria: (a) through (d) above in competency #42, (e) explain the need for transfer; (f) give the name/department/number to which you are transferring the call; and (g) perform the necessary functions to complete the transfer.

44. Outline the procedure for screening incoming calls.

    PO Given an oral description of a hypothetical incoming call and guidelines regarding the screening of calls, verbally outline the procedure for screening an incoming call. A checklist will be used to rate performance. All items must receive an acceptable rating.

45. Place simulated local and long-distance calls using the directory when necessary.

    PO Given a list of calls to be placed and necessary telephone directories, demonstrate (or list) the correct procedures for placing local and long-distance. A checklist will be used to rate performance. All items must receive an acceptable rating.

46. Record telephone messages.

    PO Given an oral description of a hypothetical telephone conversation, record the message, either handwritten or typewritten, including the following information: (a) caller's name/title; (b) date of call; (c) time of call; (d) message; (e) caller's number; (f) name of person taking message/call with 100 percent accuracy.

47. Outline the procedure for arranging a conference call.

    PO Given a conference call situation, the student will outline the procedure for arranging the conference call meeting the requirements of the local telephone company.

WORD PROCESSING

48. Type straight copy at a minimum rate and with an error tolerance acceptable for employment.

    PO Given a keyboard and unpracticed copy material of average to high syllabic intensity, demonstrate speed and accuracy by typing for five minutes at a speed of at least 40 words per minute with no more than 3 errors. (Civil Service minimum is is 40 wpm with 3 errors for 5 minutes. NOTE: Number of errors allowed increases as speed increases. Refer to Civil Service Handbook for further information.

49. Produce usable documents from unarranged copy, including: letters, memoranda, manuscripts/reports, statistical/financial reports, agendas, minutes, press releases, messages, and announcements.

    PO (a) Given keyboarding equipment and unarranged, average syllabic intensity copy of letters, addresses, and memoranda, type the letters, memoranda, and envelope addresses with each item being judged mailable based on correct placement on the page, acceptable corrections (not noticeable or a detraction from the letter), and correct punctuation.

PO (b) Given keyboarding equipment and unarranged, average syllabic intensity copy of manuscripts/reports including various styles of manuscripts and reports, agendas, minutes, press releases, and messages, type the manuscripts/reports with each item being judged mailable based on correct placement on the page, acceptable corrections (not noticeable or a detraction from the manuscript/report), and correct punctuation.

PO (c) Given keyboarding equipment and unarranged, average syllabic intensity copy for announcements and one- to five-column tabulations including main, secondary, and columnar headings, center the announcements and tabulations in reading position, exact center position on full- and half-sheet paper and on unusual size paper with 95 percent accuracy of placement and 100 percent accuracy in content.

50. Produce information on preprinted forms.

PO Given keyboarding equipment and blank forms for invoices, purchase requisitions, telegrams, and/or telepone messages, type the forms with 95 percent accuracy in placement and 100 percent accuracy in content.

51. Detect and correct all typographical and spelling errors on all documents typed.

PO Given an assignment using a textbook, dictionary, reference manual, proofreading symbols, and correction materials, detect and correct all typographical and spelling errors on all documents typed producing usable copy.

52. Identify the parts of a transcribing machine and demonstrate their uses.

PO Given a demonstration of the operation of the transcribing machine, identify the parts of the machine and demonstrate their uses with 100 percent accuracy.

53. Describe orally and/or in writing business applications available on a microprocessor system.

PO Given examples of the following business applications and demonstrations of how they are used: document management and control, recordkeeping, data processing, introduction to programming, mailing labels, and spreadsheets, demonstrate familiarity with programs other than word processing by giving a brief description of how each is used in the office with 95 percent accuracy.

54. Define orally and/or in writing terms and functions common to computer operation, care, disk handling, peripheral operation, and access to the operating system.

    PO Given a list of terms and functions common to computer operation, care, disk handling, peripheral operation, and access to the operating system, identify and describe all terms orally and/or in writing with at least 85 percent accuracy.

55. Describe the types, use, and care of word processing hardware and software.

    PO Given a list of terms describing the types and use of word processing hardware and software and a discussion of those terms, define the terms (orally and/or in writing) and describe the use and care of each of the following: equipment hardware, equipment software, and peripherals with at least 85 percent accuracy.

56. Describe how information is shared between terminals when word processing is executed on a network.

    PO Given a description of a business setting where word processing is executed on a network, describe how information is shared between terminals with 85 percent accuracy.

57. Describe all of the functions available on a word processing system.

    PO Given a microprocessor on which a student has been trained, describe orally or in writing all of the functions available on the system, including the following: (a) how to use the function keys or command keys on the system; (b) what function each key performs; (c) how to use the code or alternate key and how it affects the keyboard; (d) how to use the insert/replace keys; (e) how to use the delete functions; (f) how to save a document; (g) how to send a document to the printer; (h) how to create a list of the default settings for the system; (i) how to darken or lighten the screen display; (j) how to determine which drive handles the program diskettes and which drive handles the data diskettes, and (k) how to access the system and record and edit with 100 percent accuracy.

58. Use proper techniques to key in, store, retrieve, revise, and print a document using a word processing system.

    PO Given a microprocessor and an assignment to key in, store, retrieve, revise (using insertion and deletion functions), and print business correspondence and/or reports, perform the functions necessary to produce the documents with each document being judged usable based on correct placement on the page, correct punctuation, all errors detected and corrected, and all revisions completed as directed.

APPENDIX B

Articulation Agreement

MOUNTAIN EMPIRE COMMUNITY COLLEGE

VOCATIONAL/TECHNICAL ARTICULATION AGREEMENT

The purpose of this Articulation Agreement is to establish a procedure to enable vocational/technical students at the secondary level to obtain equivalency college credit for specified task competencies (skills) achieved at the secondary level.

Mountain Empire Community College agrees to grant college credit upon registration at Mountain Empire Community College to students completing courses in the Counties of Wise, Lee, and Scott, and the City of Norton High Schools as specified in this document in the following areas:

Air Conditioning and Refrigeration	Stenography
Drafting and Design	Typist - Data Entry
Electronics	Welding
Mining Technology	Word Processing
Secretarial Science	

We, the undersigned, agree to the terms of this Articulation Agreement to begin on June 15, 1987.

_____
President
Mountain Empire Community College

_____
Superintendent,
Wise County School System

_____
Superintendent,
Scott County School System

_____
Superintendent,
Lee County School System

_____
Superintendent,
Norton City School System

ARTICULATION AGREEMENT

In addition to completion of the specified secondary competencies, the following criteria must be met in order for the student to receive credits under this Articulation Agreement.

1. The student must enroll at Mountain Empire Community College as a credit student in an appropriate program.

2. The student must submit official high school transcripts to Mountain Empire Community College.

3. A completed Articulation Folder from the secondary instructor, counselor or principal will be issued to Mountain Empire Community College.

ARTICULATION AGREEMENT

The purpose of this Articulation Agreement is to establish a pathway to enable students at the secondary level to obtain college credit for Marketing Management.

Mountain Empire Community College agrees to grant three semester hours of college credit in the form of Marketing 100 or its equivalent with a grade indicating satisfactory results for students of Wise County completing Marketing Management or its equivalent. This will be provided without additional cost to the student.

The following conditions must be met in order for the student to receive credits under this Articulation Agreement.

1. The student must enroll in a business program at Mountain Empire Community College within two years of graduation from high school.

2. The student must submit official high school transcripts to Mountain Empire Community College.

3. The student's transcript must reflect a yearly average in Marketing Management of 90 or above. The College may ask students not meeting this criterion to display their knowledge by examination or previous equated occupational experience.

4. Students should be made aware that this course may not transfer to a four year school.

We, the undersigned, agree to the terms for this Articulation Agreement to begin July 1, 1998.

_____	_____
President, Mountain Empire Community College	Superintendent, Wise County School System

APPENDIX C

Articulation Form

MOUNTAIN EMPIRE COMMUNITY COLLEGE

VOCATIONAL/TECHNICAL

ARTICULATION FORM

FOR

OFFICE SYSTEMS TECHNOLOGY

NAME _____ SOCIAL SECURITY NO. _____

HIGH SCHOOL _____ INSTRUCTOR _____

GRADUATION DATE _____

DATE SENT TO MOUNTAIN EMPIRE COMMUNITY COLLEGE _____

Articulation is a planned process that allows high school students, who have graduated from or have attended a vocational/technical program, to receive course credit for the vocational and academic skills they have gained at the high school level. Performance-based competencies are used to measure the student's skill level.

The following criteria must be met in order for the student to receive the MAXIMUM number of credits in the Office Systems Technology program.

1. The student must enroll at Mountain Empire Community College as a student in the Office System Technology Program.

2. The student should have completed Office Systems and Information /Word Processing; Office Systems and Information/Word Processing plus either Shorthand or management Information Systems; or Office Specialist I and II at the high school or vocational school level with a grade of B or better before requesting credit.

3. The student should make the request for the allowed credit within two years after graduation from high school; after a two-year period, credit will be awarded at the discretion of appropriate MECC personnel.

4. A completed ARTICULATION FOLDER from the secondary instructor, counselor, or principal must be submitted to Mountain Empire Community College for Evaluation.

INSTRUCTIONS FOR HIGH SCHOOL/VOCATIONAL SCHOOL TEACHERS

Indicate by a check if the student can perform each competency.

Your signature will confirm that the student posses competencies checked.

PLEASE RETURN TO MOUNTAIN EMPIRE COMMUNITY COLLEGE FOR EVALUATION.

MOUNTAIN EMPIRE COMMUNITY COLLEGE

OFFICE SYSTEMS TECHNOLOGY

Please check the competencies in which the student demonstrates proficiency to receive credit.

TYPEWRITING I

____ The student must be able to type a 5-minute times writing with a minimum competency of 35 wpm with 5 or fewer errors.

____ The student should have completed Keyboarding Applications with a grade of B or better at the high school or vocational school.

TYPEWRITING II

____ The student should be able to type a 5-minute timed writing with a minimum competency of 50 wpm with 5 or fewer errors.

____ The student should have completed Office Systems and Information/Word Processing or Office Specialist I and II with a grade of B or better at the high school or vocational school.

FILING AND RECORDS MANAGEMENT

____ The student should demonstrate a knowledge of alphabetic, numeric, geographic, and subject filing, tickler files, cross-referencing documents, retrieving files, and charging out files. The student should also be familiar with microforms, modern filing equipment, and supplies.

____ The student should have completed Office Systems, Information /Word Processing, and Management Information Systems; or Office Specialist I and II with a grade of B or better at the high school or vocational school.

OFFICE SYSTEMS AND PROCEDURES I

____ The student should demonstrate proficiency levels comparable to those of an entry-level secretary in determining priorities and completing assigned tasks contained in simulated office situations integrating previously acquired knowledge and skills; composing and producing mailable copies of business communications; and critiquing human relations situations.

____ The student should have completed Office Systems, Information /Word Processing; and Management Information Systems; or Office Specialist I and II with a grade of B or better at the high school of vocational school,

SHORTHAND I

____ The student should be able to read and write basic shorthand characters, symbols, and outlines accurately.

____ The students should be able to take dictation at a minimum of 50 wam on a three-minute take and transcribe with 95 percent accuracy.

____ The student should be able to take dictation at a minimum of 40 wam on a three-minute take and transcribe with 100 percent accuracy for mailability.

____ The student should have completed Shorthand with a grade of B or better at the high school or vocational school.

INTRODUCTION TO COMPUTER INFORMATION SYSTEMS

____ The student should have completed Data Processing I and Data Processing II with a grade of B or better at the high school or vocational school.

Please insert the grade (A, B, C) in the blanks provided for each subject that the student has completed or is now taking.

KEYBOARDING APPLICATIONS _____

OFFICE SYSTEMS _____

INFORMATION/WORD PROCESSING _____

SHORTHAND _____

MANAGEMENT INFORMATION SYSTEMS _____

OFFICE SPECIALIST I _____

OFFICE SPECIALIST II _____

DATA PROCESSING I _____

DATA PROCESSING II _____

OTHER _____

Highest Typewriting Speed on a 5-minute timing with a five-error limit _____

Highest Shorthand Speed on a 3-minute timing take with 95 percent accuracy _____

Filing Competencies:

Alphabetic ____ Numeric ____
Geographic ____ Subject ____
Chronologic ____ Correspondence ____
Records Control and Retention ____
Other _____

COMMENTS:

_____
_____
_____
_____
_____
_____

_____
Signature of Teacher, Counselor, or Principal Who Completed This Articulation Folder

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

APPENDIX D

Application for Advanced Credit

MOUNTAIN EMPIRE COMMUNITY COLLEGE
REQUEST FOR CREDIT BY ARTICULATION AGREEMENT WITH SECONDARY SCHOOLS OR EQUATED OCCUPATIONAL EXPERIENCE

STUDENT: Complete this portion

Name _____

Mailing Address _____
Street

_____
City State Zip

Social Security # _____

Curriculum in which student is enrolled

Circle One: Degree Diploma Certificate Career Certificate

Course in which credit is sought _____
Discipline Number

Basis upon which student is making request:
____ Credit by Equated Occupational Experience
____ Credit by Articulation Agreement with Secondary Schools

Signature of Student _____ Date _____

(A copy of all documentation, etc., should be attached to this form.)

APPROVAL:
Instructor Recommendation? _____ Yes _____ No _____

Instructor Signature _____

Division Chair:

Student enrolled for or completed at least 6 semester hours? Yes _____ No

Division Chair recommend? Yes _____ No _____

Division Chair Signature _____

Approval of the Dean of Academic and Student Services ? Yes _____ No _____

Signature of the Dean of Academic and Student Services _____ Date _____

ADVANCED STANDING:
CREDIT BY ARTICULATION AGREEMENT WITH SECONDARY SCHOOLS OR BY EQUATED OCCUPATIONAL EXPERIENCE

POLICY:

Normally, credit for college courses is awarded for attending classes and for successfully completing course objectives. However, a student who is currently enrolled in a curriculum at Mountain Empire Community College may request credit by articulation agreement with secondary schools or by equated occupational experience(s) for courses offered in their curriculum. A student must have completed or be enrolled for at least six (6) credits before submitting the request. No more than 25% of the course credits in the student's curriculum may be awarded via advanced standing.

PROCEDURE:

The student must:

Complete the Application for Credit by Articulation Agreement with Secondary Schools or by Occupational Experience in consultation with his/her faculty advisor, or the Director of Student Services;

Seek the approval of the Application.

Submit acceptable documentation of Articulation Agreement with Secondary Schools of a comparable course (articulation agreement, etc.) or of Equated Occupational Experience (letters from employers, confirming work experience and giving job descriptions, resumes, etc.) which show at least five years current experience in the area of which course credit is requested.

The division chairperson and appropriate faculty will:

Recommend credit based upon appropriate attachments (articulation agreement of secondary schools, letters of documentation, etc.) to the Dean of Academic and Student Services.

If application is denied, the application/documentation is sent to the Dean of Academic and Student Services who will notify the student.

If application is granted, the Dean of Academic and Student Services will:

Notify the Director of Admissions and Records

The Director of Admissions and Records will:

Enter the course credit into the student's record, notify the student and return the original application/documentation to the Dean.

The Dean of Academic and Student Services will file the application for three (3) years.

APPENDIX E

Executive Secretary Program

OFFICE SYSTEMS TECHNOLOGY
Executive Secretary Specialization

Course			Cr.
First Semester			
CIS	100	Introduction to Information Systems	3
ENG	111	College Composition I	3
MTH	121	Fundamentals of Mathematics I[1]	3
+ OFT	111	Typewriting I	3
+ OFT	121	Shorthand I	3
STD	100	Orientation	1
		TOTAL	**16**
Second Semester			
ACC	105	Secretarial Accounting[2]	3
+ OFT	112	Typewriting II	3
OFT	122	Shorthand II	3
+ OFT	137	Filing and Records Management	3
OFT	231	Microcomputer Application I	3
SPD	105	Oral Communication	3
		TOTAL	**18**
Third Semester			
BUS	235	Business Letter Writing	3
BUS	241	Business Law I	3
OFT	221	Advanced Shorthand & Transcription	3
OFT	232	Microcomputer Application II	3
+ OFT	251	Office Systems and Procedures I	3
		Social Science Elective[3]	3
		TOTAL	**18**
Fourth Semester			
HLT or PED[4]			2
OFT	241	Machine Transcription	3
OFT	252	Office Systems and Procedures II	3
PSY	120	Human Relations	3
		TOTAL	**17**

+Advanced standing credit may be obtained.

[1]Appropriate higher-level mathematics course may be substituted. Student should consult with appropriate advisor.

[2]Higher level of accounting may be substituted.

[3]The student may select one of the following: ECO 120, PLS 130, SOC 201.

[4]Any health, physical education or recreation course may be used to satisfy this requirement.

APPENDIX F

Administrative Assistant Program

OFFICE SYSTEMS TECHNOLOGY
Administrative Assistant Specialization

Course			Cr.
First Semester			
CIS	100	Introduction to Information Systems	3
ENG	111	College Composition I	3
MTH	121	Fundamentals of Mathematics I[1]	3
OFT	107	Editing/Proofreading Skills	3
+ OFT	111	Typewriting I	3
STD	100	Orientation	1
		TOTAL	**16**
Second Semester			
ACC	105	Secretarial Accounting[2]	3
BUS	135	Administrative Office Management	3
+ OFT	112	Typewriting II	3
+ OFT	137	Filing and Records Management	3
OFT	231	Microcomputer Office Application I	3
SPD	105	Oral Communication	3
		TOTAL	**18**
Third Semester			
BUS	235	Business Letter Writing	3
BUS	241	Business Law I	3
OFT	232	Microcomputer Office Application II	3
+ OFT	251	Office Systems and Procedures I	3
PSY	120	Human Relations	3
		Social Science Elective[3]	3
		TOTAL	**18**
Fourth Semester			
HLT or PED[4]			2
OFT	236	Word Processing Operation and System Operation	3
OFT	241	Machine Transcription	3
OFT	252	Office Systems and Procedures II	3
		Electives	6
		TOTAL	**17**

+Advanced standing credit may be obtained.

[1]Appropriate higher-level mathematics course may be substituted. Student should consult with appropriate advisor.

[2]Higher level of accounting may be substituted.

[3]The student may select one of the following: ECO 120, PLS 130, SOC 201.

[4]Any health, physical education or recreation course may be substituted to satisfy this requirement.

MARGARET ANN DAVIS
609A Wood Avenue West
Big Stone Gap, VA 24219
(540) 523-3670

Education

Virginia Polytechnic and State University, Blacksburg, Virginia. Ed.D. in Vocational Technical Education. Graduate May 8, 1998.

Virginia Polytechnic and State University, Blacksburg, Virginia. M.Ed in Community College Education. Graduated August, 1984.

Berea College, Berea, Kentucky. B.S. in Business Administration. Graduated May, 1971.

Powell Valley High School, Big Stone Gap, Virginia. Diploma, May 1967.

Work Experience

Mountain Empire Community College, Big Stone Gap, Virginia. Professor, Business Technology Division. 1978 to present.

Mountain Empire Community College, Big Stone Gap, Virginia. Coordinator of the Learning Laboratory/part-time instructor. 1973-1978.

Mountain Empire Community College, Big Stone Gap, Virginia. Secretary for Continuing Education/part-time instructor. 1972-1973.

Berea College Press, Berea, Kentucky. Typesetter. 1971-1972.

Berea College, Berea, Kentucky. Work-study student. 1967-1971.

Professional Memberships

Delta Pi Epsilon
Phi Delta Kappa
Virginia Business Education Association
Southern Business Education Association
National Business Education Association
Virginia Community College Association
Phi Beta Lambda, Professional Member
Virginia Vocational Association
American Vocational Association

Community Affiliations

Executive Board Member of the Wise County Clean Team
Member of the Pastor/Parish Relations Committee
Forensic judge for local high school competition
Fund raiser for Mountain Empire Older Citizens
Guest speaker for Professional Secretaries International
Judge for Future Business Leaders of America regional competition

Seminars/Conferences Attended

Business Education Summer Workshops - Multimedia Literacy
Internet and Netscape Navigator Seminar
E-Mail Seminar
Desktop Publishing & Design Workshop
Tennessee Eastman Scannable Resume Seminar
Temporary Employment Agencies Seminar
Web Page Construction Seminar
Virginia Community College Association Meeting
New Horizons Conference
Appalachian Paralegal Association Meeting
Clinch Valley College Annual Forum on Education
Communication Skills for Women Seminar
Pagemill 2.0 Seminar

Skills and Recognition

Key at 100 w.p.m.
Proficient in the use of word processing software, Dbase software, spreadsheet software, Presentation software, and Internet.
Certified in Introduction to Learning Technology by the VCCS Professional Development Initiative.
Seminar leader in office-related topics, including updating office skills, communication, stress, and work attitudes.

References

Furnished upon request

Margaret Ann Davis

Margaret Ann Davis

April 24, 1998

Date