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ABSTRACT

In view of the steady decline in vocational enrollments since 1979, a study was conducted to identify factors that influence students not to enter into a high school vocational curriculum. The study questionnaire was given to 633 nonvocational 11th-grade students from 5 randomly selected southwestern Ohio high schools. One month after the student questionnaires were administered, a random sample of 16 parents was contacted by telephone to obtain their views on vocational education and to authenticate data collected from the students. School demographic data were also collected from research coordinators at each participating high school. The top five reasons why students chose not to participate in vocational education were (1) the belief that academic programs would better prepare them for college; (2) they never even thought about vocational education; (3) they did not wish to take the vocational programs offered; (4) they felt vocational education would keep them from participating in extracurricular activities in their home schools; and (5) joint vocational schools had poor images in their community. (Forty-one references are listed and 22 tables are provided. Appendixes include curriculum choice classification guidelines, school demographic data, the parent interview questions, the student questionnaire, a socioeconomic coding scale, directions for administering the questionnaire, an alternative activity intelligence test, and an introductory letter to school administrators.) (MN)

Factors That Influence a Student Not to Enter Into a High School Vocational Curriculum

By

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INTRODUCTION

Background and Setting

In the 1986-87 school year there were almost 16 million Americans enrolled in secondary vocational education programs. In Ohio there were 165,639 students or approximately 59% of Ohio's 11th and 12th grade students enrolled in nine vocational programs. Ohio had 119,208 vocational high school students (Grades 9-12) enrolled in the areas of Agricultural Education, Marketing Education, Health Education, Home Economics (Gainful), Home Economics Education, Business Education and Trade and Industry Education. Table A shows the annual enrollment data for Ohio.

TABLE A

Ohio's Total Vocational High School Enrollment

Years	Students
1986-87	119,208
1985-86	120,091
1984-85	124,316
1983-84	130,436
1982-83	135,317
1981-82	140,769
1980-81	147,703
1979-80	151,715

There has been a steady decline in enrollment in vocational programs since 1979. This represents a decline of 21%. When looking only at 11th and 12th grade vocational students enrollment the trend continues.

TABLE B

11th and 12th Grade Enrollment

	Vocational	All Public Schools	% of Market
1986-87	100,281	277,228	36%
1985-86	101,289	270,548	37%
1984-85	105,128	273,328	38%
1983-84	111,162	280,208	40%
1982-83	115,706	288,564	40%
1981-82	120,593	301,721	40%

Table B indicates that there were 100,281 11th and 12th grade vocational students enrolled in vocational programs in Ohio. There has been a steady decline in enrollment for the six year period 1981-87. Ohio has realized a 17% decline in enrollment in 11th and 12th grade programs in the six year period. The programs realizing the decline in enrollment include: Agricultural Education, Marketing Education, Health Education, Home Economics (Gainful), Home Economics Education, Business Education and Trade and Industry Education. In comparison, enrollment in Ohio's 11th and 12th grades in all public schools has been declining during the same period. Enrollment was as high as 301,721 in 1981-82 to a low of 277,228 in 1986-87. When comparing the market share of vocational education, that too is on the decline. Vocational students represented 40% of the market share of 11th and 12th grade students in the public schools in 1981-82. In 1986-87 that share was 36%.

Vocational education can offer its graduates advantages over graduates from a general curriculum. Desey, Mertens & Gerdner (1984) concluded that vocational graduates have an advantage in long term earnings over graduates of the general curriculum. Ghazahah (1987), found that vocational graduates enjoy a higher immediate income and experience fewer days of unemployment than graduates of the general population. For youth aged 21 and under, the general unemployment rate is at 18.8%, while vocational completers of job training programs experience only

a 8.3% unemployment rate (Department of Education, 1988). Other benefits that vocational graduates receive include an eight times higher self-employment rate (The National Commission on Secondary Vocational Education, 1984).

Vocational education currently prepares students for 26 of the 37 occupations the U.S. Bureau of Labor Statistics identified as those expected to have the largest growth between 1984-1995 (Department of Education, 1988). Currently 80% of the jobs in the United States do not require a college degree (National Commission on Secondary Vocational Education, 1984). Sixty percent of vocational graduates go on to some form of postsecondary training, and fifty percent of those go on to a four year college. If vocational education offers its graduates higher wages, lower unemployment, a chance to be trained in an expanding field, as well as a sixty percent probability of postsecondary training, then why is Ohio's enrollment declining?

Ginzberg (1951) stated that, "Occupational development is an ongoing, continuous, generally irreversible, orderly, patterned and dynamic process, which involves interaction between the individual's behavioral repertoire and demands made by society, that is by developmental tasks." (p. 239) Ginzberg states that occupational development is a continuous process that is influenced by a variety of sources. If the sources or barriers that block students from enrolling in vocational education were identified, then administrative personnel could utilize this information in evaluating and planning for their marketing and recruitment efforts. Effective strategies could be developed in order to recruit more students from general and college preparatory curriculums into a vocational education curriculum.

PROBLEM STATEMENT

This study investigated factors that influence a student not to enter into a high school vocational curriculum. Given that students can self-select a curriculum for their high school years, one needs to identify reasons for not selecting a vocational program. Many students enroll into an academic (college preparatory) or into a general education curriculum instead. The purpose of this study was to identify reasons why high school students elect not to enroll into vocational curriculums.

Research Objectives

1. To describe the characteristics of the schools (ratio of guidance counselor to students, student enrollment, teacher enrollment, teacher-student ratio, distance to a vocational school, number of teachers, number of counselors) selected in the sample.
2. To describe the characteristics (sex, race, socioeconomic status, curriculum choice-general or college preparatory) of the students who chose not to enroll into a high school vocational curriculum.
3. To describe the reasons students give for choosing not to enroll into a high school vocational curriculum.
4. To describe students' images of vocational education and vocational schools.
5. To determine the relationships between student characteristics and reasons for not choosing to enroll into a high school vocational curriculum.
6. To determine who influences a student to make a decision about enrolling into a high school curriculum.
7. To describe parents' images of vocational education.
8. To describe the parents' perceptions of why their child chose not to enroll into a high school vocational curriculum.

Definitions

Parental Influence

Refers to the degree or extent to which parents influence, support, assist, plan, desire, or encourage the respondent to seek or possess high levels of achievement or goals. (Mima, 1978)

Vocational Curriculum

A student enrolled in this curriculum has spent a considerable proportion of time and in vocational course work as compared with the basic skill development that is preseumed to be the major function of academic and general education. The average vocational concentrator will have spent about 10 percent of his or school time in vocational courses. Students who concentrate in a vocational specialty average 6.3 Carnegie Units of vocational course work upon graduation from high school. A concentrator is defined as a person who does not necessarily use all electable credits in the vocational specialty, but uses a substantial majority of them. Vocational students take a substantial number of courses in vocational education and develop a concentration in one area. The average vocational concentrator will have spent about 10 percent of his or her school time in vocational courses. Students who concentrate in a vocational specialty average 6.3 Carnegie Units of vocational course work upon graduation from high school. A concentrator is defined as a person who does not necessarily use all electable credits in the vocational specialty, but uses a substantial majority of them.

The vocational student, as a junior in high school, will have been enrolled in at least 2 continuous years in a vocational specialty program area. It is realistic that the vocational student, as a junior, will have accumulated 2 - 2.5 Carnegie Units of vocational course work. Vocational specialty program areas include: vocational agricultural education, home economics education, business education, marketing education, trade and industrial education, and

health and safety services education.

Academic (College Preparatory) Curriculum

A student enrolled in this curriculum is taking coursework to prepare for entry into a 4 year college or university. In October of their junior year they usually take the PSAT, while in the Spring they will take the ACT or SAT. These tests are required for admission into major colleges and universities. Courses selected by students enrolled in an academic curriculum include: chemistry, physics, algebra, geometry, biology, advanced math, advanced science and/or foreign languages. Academic track students average 2.7 vocational credits upon graduation from high school.

General Curriculum

A student enrolled in this curriculum is taking coursework of a general nature in order to earn enough credits for graduation. Courses selected by students enrolled in a general curriculum include: consumer math, general math, general science, life science, earth science, industrial arts, general accounting and/or typing. General track students average 4.6 vocational credits upon graduation from high school.

Limitations

The population studied was non-vocational eleventh grade students from southwestern Ohio. Five high schools were randomly chosen from all high schools in southwestern Ohio. All eleventh grade non-vocational students were given the questionnaire. The population was subject to sampling error. The results of this research cannot be generalized to all students in Ohio because of the population studied and the chance that the sample was not representative of the entire population. These results can only be generalized to the population sampled.

All the schools selected do not have equal demographic characteristics. The schools vary in size, location and if they have a joint vocational school or

vocational programs in the home high school.

This study looked at selected variables that affect a student's decision in selecting a curriculum. There may be other barriers that influence students not to enroll in vocational education.

The respondents may have been more sensitized to thoughts about the image of vocational education that were listed in the questionnaire when stating their open-ended thoughts about vocational education and vocational schools.

Significance of the Problem

The information highlighted in this study will be useful to the director of vocational education, and chief vocational education administrators at the State Department of Education, school directors, superintendents, guidance counselors, and teachers in the southwestern region of Ohio. Those involved directly with marketing and recruitment efforts for vocational education will benefit from this study. Strategies can be developed in order to break down the barriers that were identified by the high school students in this study.

It is hoped that by following the findings and recommendations of this study, administrators will be better able to promote vocational education. Guidance counselors, in the southwest region, will be made more aware of what factors influence a student not to enter into a vocational curriculum. Hopefully, they will be able to use this information to better discuss curriculum choice with eighth, ninth, and tenth grade students.

It is possible that a more aggressive marketing campaign will be designed for vocational education in the Southwest region. Recruitment figures could be expected to be more optimistic following such a campaign.

REVIEW OF LITERATURE

Introduction

Ginzberg (1951) believed that career development was an ongoing continuous process. Ginzberg also believed that it was a process that involved choices. In order to better understand the process that one encounters when making a decision, Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman and Prouvus (1971) developed the Decision Making Process. The steps in the process include the following:

1. Becoming aware that a decision is needed.
2. Designing the decision situation.
3. Choosing among alternatives.
4. Acting upon the chosen alternative.

In this model, the decision making process is hierarchical. Any single decision may be factored into several processes of lower ordered decisions. These lower ordered decisions may also be factored. In any decision, each stage may include many microscopic choices, each of which was part of the decision making process. Stufflebeam's et al. (1971) explanation of the decision making process fits together with Ginzberg's career development theory. Both theories suggest that any decision is an on going task that is comprised of many parts and is not a single decision.

The choice to enter into vocational education is a choice toward choosing a career. Stufflebeam et al. would agree that the career choice is a decision that would follow the four steps of the decision making process.

There are several decision making hypotheses on career choice that help explain the process of choosing a career. Miller (1985) summarized the most prominently accepted theories into four categories.

Personality Theory

Personality theories involving personal characteristics that emphasize student interests, achievements, and aptitudes and how they influence career

decisions. Environmental factors are of major importance in these theories. A student's personality is determined by environmental influences such as parents, peers, co-workers and friends. Career decision making is viewed as a process where students with a particular personality select a work environment that compliments their personality.

Theories that involve personal characteristics do not involve characteristics such as values, personality, or self-concept. These theories also do not explain how career development or growth occurs, or describe career changes related to life periods.

Sociological Theory

Sociological theories stress environmental factors that influence career choice. The theory relates factors such as parents' occupation, income and education of parents, sex, race, ethnic group, religion, place and type of residence, family size and stability, and school and community environment to a career choice. These characteristics set boundaries and influence personality and the range of options which are available to the individual.

The sociological theory does not provide for personal factors such as family, peers and friends influence. It also does not provide explanations for growth and development.

Developmental Theory

The developmental theories have their origin in psychology. Developmental psychologists believe that career development is a process which starts at birth and continues throughout a person's life. They assume choices are made only a few times during an individual's life. At the elementary level, general occupational understanding is emerging along with a student's awareness of his interests and abilities. At the high school level, students become aware that career choices are needed and explore a variety of opportunities and make initial career decisions.

Environmental factors are also considered an important aspect in career development. This theory suggests that people have unique characteristics and can be satisfied and successful in several different occupations. Self-concept is also viewed as a major factor in career development.

Decision-Making Theory

The decision making theories match personal traits to occupational factors. This type of theory assumes that personal values are a major factor and will influence and guide the decision process.

Career decision making is a systematic lifelong process that can be described and learned. The steps involved in career decision making parallel those of general decision making described by Shufflebeam et al. (1971) The process begins with an individual recognizing that a decision need to be made. Next, they clarify their values to guide the process. The third step involves identifying all decision alternatives and evaluating each alternative according to potential gains, cost, time, money, effort and probability of success. An individual will then select and implement a choice.

The four theories place each researcher's hypothesis concerning the career decision process into a specialized group, depending on the perspective of the researcher. Hoppock (1957) reviewed and analyzed over a dozen theories of occupational choice and development, including those of well known authorities such as Ginzberg, Tiedmion, Holland, Roe and Super.

Hoppock says, "The existence of several conflicting theories suggests the possibility that there may be some truth in all of them. The principle of individual differences, so familiar to counselors, suggests the same possibility. One theory may explain the behavior of some persons, but we may need another theory to explain the behavior of others." (25, p.114)

Zacceria (1965) commented on Hoppock's theory. He states, "The central

focus of this theory is upon the process of choosing an occupation, the factors influencing the choice and the adequacy of the choice as measured by need satisfaction, success, or personal adjustment." Just as Zacceria believed that there were factors influencing career choice, Super (1963) believed that at each turning point in career decision making, an internal (personal) or external (environmental) force influenced that decision. The concept of career decisions being influenced is again reinforced by Ginzberg (1951). Ginzberg believed that occupational choice is influenced by both standards of the community and by internal impulses.

Super, Ginzberg and Zaccaria's suggestions along with the characteristics described by Miller's summary of career decision making theories, list a wide array of factors that may influence career decisions. Lam's (1982) classification was used to describe the barriers that influence the student's decision not to enroll in vocational education. This classification divides the reasons into three main categories. The first category is intrapersonal reasons which includes attitudes, perceptions, images, motivation, career maturity and value systems. The second category is immediate external reasons, which includes two sub-categories. The first sub-category is school factors. These include distance to schools, friends, and extracurricular activities. The second sub-category is influence of parents, friends, counselors, neighbors, teachers and other relatives. The final category is remote external reasons which include socioeconomic status, parental income and parental educational levels.

Intrapersonal Reasons

Career Maturity

The concept of career maturity was introduced by Super (1955). Super defined career maturity as the repertoire of behaviors that help identify, choose, plan and execute career goals, being at an average level in career development for one's age. Super (1963) also considered congruence between

vocational behavior and expected vocational behavior at that age. Since Super introduced the concept of career maturity he completed another 1960 study where he found that there was no significant relationships between age and career maturity, but that there is a significant relationship between grade and career maturity. The problem in career maturity arises when students are asked to make a choice too soon. Herr (1970) states that the complexity of the factors involved in a career choice make it impossible for students to make realistic choices until they are seniors in high school or after high school. Vocational school directors also state that students were neither knowledgeable enough about careers nor mature enough to make appropriate career decisions (O'Neill 1985). The choice to enter into a career that vocational education has to offer is made at the end of the tenth grade year. According to Herr and O'Neill this choice is an unrealistic one and one that a student is not mature enough to make realistically.

Images, Perception and Attitudes

An individual will reject an activity that has had a negative image or words associated with that activity (Social Learning and Career Decision Making 1979). The National Commission on Secondary Vocational Education showed that the general perception of vocational education to be a dumping ground stigmatized by only having less able students. This image is only reinforced by teachers of sending schools that have a negative image of vocational schools and believe students who attend are not accepted by their peers (O'Neill 1985). O'Neill also discovered that directors of vocational schools believed negative attitudes towards vocational education causes difficulties in recruitment and selection of students.

When students were asked if they did not attend the skills center because they believed it was for potential dropouts, 79% disagreed. The nonattenders indicated that the Skills Center image was good. The students interviewed did

not feel that the Skills Center was for potential dropouts or necessarily for noncollege bound students (Abendroth 1985). When students were asked to self-report on the image of vocational education they rated it as either positive or very positive (Dube 1987). Dube did find that even though students did have an overall positive attitude toward vocational education, 51% believed that their friends had a negative image of vocational education. He believed that this negative image contributed to students not enrolling in vocational education.

Motivation and Value Systems

A person will choose a career or occupational goal which will maximize his gains and minimize his losses. These gains and losses include money, prestige, power, and other internal motivational factors (Herr 1970). Other psychologists and sociologists have developed theories which explain occupational choice as a means of satisfying needs such as:

- o Self preservation
- o Independence
- o Security
- o Welfare of one's children
- o Socioeconomic status
- o Prestige
- o Service to humanity
- o Achievement
- o Dominance
- o Power
- o Creativity
- o Challenge

People assess the compatability of the occupation with their image of who they would like to be and how much effort they are willing to exert to enter those occupations (London 1970). Occupational images are obtained as generalizations a person makes about a particular occupation. The term "occupational image" refers to the occupational stereotype derived from the observation of the following five items (London 1970):

- o Personalities of people in those jobs
- o Type of work they do
- o Type of lives they lead
- o Rewards and conditions of the work
- o Appropriateness of the job for different types of people

Ginzberg (1951) believes that once a student has pursued a vocational course of study for two years, the likelihood of his considering college is decreased because of the difficulty of preparation. When students were questioned concerning the vocational school, 35% believed that it was for non-college students and therefore chose not to enroll (Abendroth 1985). Students may believe that vocational education is for non-college students but vocational graduates tend to fare much better in post secondary education than generally recognized (Campbell 1986). Herr (1983) found that 75% of vocational students had plans for further education or training after graduation. Sixty percent of vocational graduates actually do go on for further training and 50% of those attend a four-year college (Department of Education 1988).

Prestige of a potential job will also help determine if a student will choose that occupation. Voctional education tends to train for jobs of low prestige (Gottfreson 1981).

Immediate External

School Factors

Forty-three percent of non-vocational students said they had considered taking a vocational course of study (Jacobs 1975). The major barriers that blocked their entrance into vocational programs were graduation requirements and college entrance requirements. Eighteen percent of the 43% that had considered vocational education were discouraged from entering because of classes they needed for graduation. In 1985, after graduation requirements were increased to 22 credits, 12 out of 50 states reported decreased enrollment. Ohio's vocational education enrollment declined by 65,863 students and 60% of the vocational programs reported decreased enrollment (Price 1985). Currently 66% of the students' school day is used for academic/core curriculum leaving 34% for all electives. More time during the day is being spent in academic areas while the largest time decrease is in vocational areas. This decreased time has had an impact on vocational classes offered, enrollment, student interest, teacher hirings, teacher removal, budgeting (Smith 1987).

Jacobs' (1975) West Virginia study found that traveling to another school was a prominent immediate external factor that caused students not to enroll in vocational education. Seven percent of those students that had considered vocational education, choose not to enroll because they did not want to take the bus to school. Scalon's (1984) arch reinforced Jacobs' findings and concluded that transportation, busing and distance, discouraged students from enrolling in vocational education. Other factors associated with leaving the home school that discouraged entrance into vocational education include, leaving friends, exclusion from extra-curricular activities, and leaving the home high school (Jacobs 1975).

Curriculum is another immediate external school factor that discourages student enrollment into vocational education. Jacobs found that lack of desired

curriculum and denial of entrance into a curriculum of choice discouraged 7% of potential students from enrolling into vocational education.

Influence of Significant Others

An individual is less likely to express a preference and more likely to express a rejection for an activity or field of study that has had consistently negatively expressed opinions from a valued person (Social Learning and Career Decision Making, 1979). This theory suggests that if a valued person has a negative view of an activity, students are less likely to become involved in that activity.

Teachers

The results concerning the influence of teachers on student choice to enter into vocational education are conflicting. Dube (1987) found that teacher's affect upon students does not influence their entrance into vocational education. He found that only 4% of teachers discourage entrance into vocational education, while 72% were neutral and 12% encouraged enrollment. Beukes (1986) also found that teachers have little or no influence on students' career choices and occupational development.

Conflicting research concerning teacher influence was completed by Herr (1987) and Lejlune (1977). Herr found that students will seek the advice of a teacher before enrolling in vocational education. Lejlune concluded that teacher contact with potential vocational students is a recruiting technique for vocational education.

Parents

Parent-child interactions are the crucial variable in the development of personality traits which influence later vocational behavior (Osipow 1985). The findings on parental influence were inconsistent. Students seek parental advice before entering into vocational education (Herr 1987). Herr also found that parents have less influence than they believe, and students and parents disagree

on the amount of influence parents actually have. Otto (1987) and London (1970) also found that parents are the most influential factor when it concerns vocational education and career development.

"Parents have no influence on their children's decisions involving career choice" (Beukes 1986). Reynolds (1976) agreed with Beukes and concluded that parents have little influence on their children's career choice.

Friends and other students

Eighty-nine percent of friends will try to discourage a student from entering into a vocational program while only 14% will try to encourage a student's enrollment (Dube 1987). Students will seek the advice of a friend before entering into vocational education (Herr 1987). While Herr found that students may seek the advice of a friend before making the decision to enter into vocational education, Beukes (1986) and Reynolds (1976) found that friends and other students had no influence on vocational choices and decisions involving vocational enrollment.

Counselors

Counselors do not see vocational education as the only educational option nor do they see it as their duty to persuade students toward one curriculum choice or the other. The counselors see career decision as the responsibility of the student and the parent (Herr 1987). Herr also found that students are likely to seek advice from counselors before entering into vocational education. Conflicting results were reported by Reynolds (1976), Bently and Hemp (1958) and Beukes (1986). They concluded that counselors and guidance programs had little or no influence on students' decision to enroll into vocational education.

Other relatives

Relatives other than parents moderately influenced a child's career choice (Bentley and Hemp 1958). Forty-eight percent of the College of Agriculture freshmen at Purdue and Illinois Universities reported that relatives other than

parents moderately influenced their career decisions. Conflicting research reported by Herr (1987) found that relatives, other than p. nts, are not asked for advice concerning vocational decisions.

Remote External Reasons

Socioeconomic Status

Several studies have found that there are significant differences among high school students (Bragg, Parks, Daumen, Campbell, 1966; Campbell, Orth, Spitz, 1981). One of those differences is the students' socioeconomic status (SES). Campbell et al. (1987) noted that a higher proportion of low SES students are enrolled in vocational curriculums than general or academic. Holland (1985) implied that vocational interests flow from a person's life history and personality. SES is an important factor in understanding the reasons students choose not to enroll in vocational education.

PROCEDURES

Research Design

This project was developed as a descriptive survey research design. Relationships among variables were explored. The sample was described in terms of student characteristics such as sex, race, curriculum choice and socioeconomic status. The schools were described in terms of size, teacher-student ratio, distance to the vocational school and guidance counselor-student ratio. Students responded to a questionnaire in order to identify their reasons for electing not to enroll into vocational education. They indicated their images of vocational education and vocational schools and reported on who influenced them in making a decision to not enroll into vocational education.

Subject Selection

Due to the nature of funding this project, the population used in this study was all non-vocational 11th grade students in the Southwest Ohio Region Personnel Development Center during the 1987-88 school year. A cluster sampling technique was used, where schools were the sampling units and all 11th grade non-vocational students in the schools were selected. The list of schools included in the population was supplied by the State Department of Education, Research and Survey Services, Division of Vocational and Career Education. They provided a listing of all districts included in the Southwest Region boundaries. The listing of non-vocational high schools included a total of 138 schools. In order to estimate the number of students in the 138 schools, 14 schools (10% sample) were selected at random. The number of students in each of these 14 schools was determined to be 11,833 using the Ohio Educational Directory 1986-87. Therefore, the total population for the 138 schools was estimated to be 118,330. The size of the 11th grade class was then estimated to be 30,000 students. Using the formula to determine sample size in order to be

representative of the given population, (Krejcie & Morgan, 1970) it was determined that 379, 11th grade students would be needed for the sample. The margin of error in the selection of the sample size was plus or minus 5%. The 379 subjects were obtained by selecting five schools at random using a table of random numbers.

Once the five schools were notified they had been chosen, a decision was made to alter the selection procedures. It was decided that all 11th grade, non-vocational students in the five schools would receive the questionnaire, rather than to randomly select intact classes. This decision was made due to the fact that students were placed by ability grouping in many of the English and history classes. This avoided problems in the representativeness of the sample which might have been caused by a second round of cluster sampling.

The actual number of students completing a questionnaire consisted of 633 students rather than the original estimated sample size of 379 students. This helped in making sure that the sample selected was even more representative of the population.

All non-vocational 11th grade students present on the day of the data collection were surveyed. Five students did not agree to participate because of a reluctance to share personal information. All responses were coded into a computer from the completed questionnaires. Unanswered items were coded as missing data.

Since only non-vocational, 11th grade students were needed for the survey, students were sorted by curriculum choice by two methods. A procedure was developed to sort the vocational curriculum students, academic curriculum students and general curriculum students. All guidance counselors were requested to compile their 11th grade class lists. They were then asked to sort the students into three groups based on the three curriculum choices. The "Curriculum Choice Classifications Guidelines" was sent to each counselor. Four

counselors provided the class list, sorted by curriculum choice, to the researcher prior to data collection. This enabled the administrator of the questionnaire to sort the vocational and the non-vocational students. Only non-vocational students (academic and general curriculum choice) were given the questionnaires.

A second method was also employed in order to sort students by curriculum choice. Students were asked whether they were enrolled in vocational classes, before questionnaires were distributed. Those responding that they were vocational students were further questioned by the administrator of the questionnaire and the school personnel member present. See Appendix A for the Curriculum Choice Classifications Guidelines.

Instrument Development

Factors that influence a student to not enter into a high school vocational curriculum came from a Student Questionnaire, a School Demographics Data form, and a parent/guardian interview. The Student Questionnaire was developed following the principles outlined by Dillman (1978) and are described below. The School Demographics Data form (Appendix B) was used to acquire demographic information from the five schools. The parent/guardian interview (Appendix C) was used to determine the parents' perception of why their child chose not to enroll into a high school vocational curriculum.

Student Questionnaire

The Student Questionnaire (Appendix D) was developed based upon instruments used in previous research, a review of related research and literature, and interviews with high school guidance counselors, teachers and administrators. Researchers were interviewed in order to determine the appropriate areas to explore. The instrument was designed to obtain information about factors that influence a student to not enter into a high school vocational curriculum.

A section of the student questionnaire measured the socioeconomic status (SES) of the student. This section was developed from a previous research study, High School and Beyond, done by the National Opinion Research Center (NORC).

Student socioeconomic status (SES) was operationalized as a composite score of six variables including family incomes, father/male guardian occupation, mother/female guardian occupation, household possessions, father/male guardian education and mother/female guardian education. (Riccobono, J. et al., 1981; Jones, C., 1986). The education level of the father/male guardian and the mother/female guardian indicated the highest grade level of formal education completed by each parent (See Appendix E for coding scale).

The total income of the parents was represented by the total amount of money earned through employment or other means. The values in the three income categories were increased from the original survey to better represent family incomes in 1988 (See Appendix E for coding scale.) The percentage increase was based on recommendations from a panel of experts, an educational administrator, and census data corresponding to the increase in average family income since 1984, the year the original SES questionnaire was administered (Jones, C. et al., 1986).

The occupation of the father/male guardian and mother/female guardian was coded into the Duncan socioeconomic index scores. (See Appendix E for coding scale). The mother/female guardian's occupation was recommended by members of the panel of experts to be included as one of the SES components, due to the frequency of dual income families.

A household item composite score was indicated by the common household items possessed within the home (See Appendix E for coding scale). The sum of scores from the thirteen items became the composite score. The researchers and members of the panel of experts suggested that microcomputers, video tape recorders

(VCR), and compact disc (CD) players be substituted for three former household items in order to make the items more representative for 1988.

Means were computed on the six SES components. The six variables were standardized and summed over the non-missing components. The resulting scores were divided by the number of non-missing components. When fewer than four variables were available the case was not used.

A panel of five mothers of non-vocational high school students attending Oak Hill High School, a school not included in this study, was interviewed to determine their input and images of vocational education. Parent responses in the interview were used to develop the student questionnaire. A copy of the questions asked in this pilot test is included in Appendix C. The interview served to ground the instrument in order to develop face and content validity.

Content validity was established by two panels of experts. The first panel was present at a seminar at The Ohio State University. Members of the panel consisted of seven university faculty, two vocational researchers from the National Center for Research in Vocational Education and six vocational education graduate students.

The second panel was a six member panel of experts, selected to review the second draft of the instrument. Members of the panel included university faculty in Agricultural Education and Psychology from The Ohio State University and Cornell University. Also serving on the panel were researchers from The National Center for Research in Vocational Education. Comments from the panel of experts and seminar participants were summarized and a third draft of the instrument was developed.

The third draft of the instrument was administered to five non-vocational 11th grade students at Oak Hill High School in Oak Hill, Ohio. This field test school is not located in the Southwestern region of Ohio. Students were interviewed, as a group, upon completion of the questionnaire to determine if

problems of interpretation existed. The instrument was revised based on the students' feedback.

In order to determine reliability, the instrument was then pilot tested at Big Walnut High School in Sunbury, Ohio. This school is not located in the Southwest region. Twenty, non-vocational 11th grade students completed the instrument. Students were encouraged to ask questions if they did not understand a question. Research assistants took note of the questions asked. The students were interviewed as a group after completing the questionnaire in order to determine if there were problems interpreting the meaning of the questions. Their suggestions were solicited. Two weeks later, the same students were given the same instrument in order to determine the reliability of the instrument.

Test-retest procedures were used to determine coefficients of stability. Pearson product moment coefficients, calculated using SPSSPC+ statistical package, ranged from .42 to 1.00. Summated Likert type scales were used for questions 15 and 22, and warranted the use of an internal consistency measure such as the Cronbach's alpha to determine reliability. Cronbach's alpha for the summated scales ranged from .63 to .83. The questionnaire was again revised and copies were printed for distribution to the sample. The final draft of the instrument is included in Appendix D.

Parent/Guardian Interview

The parent/guardian interview was field tested on a group of five mothers at Oak Hill High School which is not in the population studied. The interview format was refined and confusing questions were amended prior to the actual interviews. The parent/guardian interviews were pilot tested on three parents of students selected at random who attended Big Walnut High School. These were the parents of students who participated in the pilot testing of the questionnaire. During the pilot test telephone interview, the parents were

asked the set of questions in the interview schedule. They were asked to comment on the wording of the questions to determine if there were problems in interpretation. They were at ease in answering the questions and felt they could respond appropriately. No revisions were made to the set of interview questions. The interview questions are included in Appendix C.

One month after the student questionnaires were administered to the sample, a random sample of 16 parents were interviewed by telephone in order to solicit their views on vocational education. An information page from the student questionnaire served to facilitate calling the parents. Students had provided needed telephone numbers and parent names on the survey. The parent interviews were conducted in order to authenticate the data collected from the students completing the questionnaires. The comments are summarized in the results section of this report. A copy of the parent/guardian information sheet can be found in Appendix D.

School Demographic Data

The demographic data needed for each school was collected by mailing a one page survey to the research coordinators at each of the five participating high schools. The "School Demographic Data" sheet is included in Appendix B. All responses were received promptly. Information gathered included: population of the school, number of teachers, number of guidance counselors, number of juniors attending the local vocational school and distance to the local vocational school.

Conditions of Testing

The schools participating in the study were notified that the questionnaires were ready for distribution. They were asked to select a date that would be convenient in which to administer the instrument to all non-vocational 11th

grade students. Questionnaires were administered on the following dates:

1.	Colonel White	Dayton, Ohio	April 11, 1988
2.	Tri County North	Lewisburg, Ohio	April 13, 1988
3.	East Clinton	Lees Creek, Ohio	April 15, 1988
4.	Miami Trace	Washington Court House, Ohio	April 20, 1988
5.	Hamilton	Hamilton, Ohio	April 29, 1988

A copy of the "Directions for Administering the Questionnaire" is included in Appendix F. The researcher and/or research assistants were present in each of the classes to administer the instrument. Throughout the day, students were in intact history or English classes during the administration of the instrument. Regular classroom teachers were also present to assist in identifying students by name and by curriculum choice. Vocational students were sorted from the non-vocational students and were given an alternative intelligence test, so as to occupy their time. A copy of the alternative activity is in Appendix G. Verbal instructions were given to the students in order to establish the purpose of their participation and to clarify the questions. Written directions are on the instrument. Students were monitored during the survey time and questions were answered by the researchers. Students took an average of twenty minutes to complete the survey. They could take as long as they wished in order to complete the questionnaire. Students were thanked for their cooperation after the surveys were collected.

Data Analysis

All completed questionnaires were coded by the researcher and three assistants. Data were entered into a personal computer and analyzed using the Statistical Package for the Social Sciences (SPSSPC+).

Descriptive statistics were employed in order to describe the sample. Correlation coefficients were computed to show relationships. Analysis of variance was computed to describe differences in perceptions of vocational

education and vocational schools among groups of students, possessing different characteristics. Frequencies and measures of central tendency were computed and scattergrams were made to show relationships.

For the open ended responses on the questionnaire, data were analyzed by summarizing the responses into appropriate categories. Frequencies and percentages were computed for each category.

The parent/guardian telephone interview information was summarized by the research assistant making the call. Notes were taken during the interview and were later transcribed for the final document.

RESULTS

Description of the Sample

There were five high schools selected at random from the population of schools in Southwestern Ohio. Joint vocational schools were not included in the population. Four of these schools are comprehensive high schools, offering vocational programs. Vocational programs offered in these schools included: Agricultural Education, Home Economics Education, Occupational Work Experience and Marketing Education. These schools served as "feeder schools" to joint vocational schools or career centers. The fifth school (Hamilton) is a self-contained vocational school as well as a comprehensive high school. Students do not leave this school in order to enroll in a vocational curriculum.

Three of the schools are located in rural school districts, while two are serving an urban city population. The largest school (Hamilton) provided 314 students, which is about half of the total sample of students selected for this study.

Table 1 describes selected characteristics of the five schools. The schools selected were Colonel White, Tri-County North, East Clinton, Miami Trace and Hamilton. Four schools included grades 9 - 12, while one school included grades 10 - 12. There is variability in the size of the schools, with Tri-County North being the smallest school (350 students). Hamilton was the largest school (1,900 students). Likewise, Tri-County North had a low number of teachers and guidance counselors. Hamilton employed the most teachers and guidance counselors. The smallest teacher-to-student ratio was found at Miami Trace. This indicates that there are more teachers employed per student enrolled. East Clinton had the highest ratio of guidance counselors to students. This indicates that there are fewer guidance counselors employed per student enrolled. The vocational schools were located as close as next door (Hamilton), to as far away as 25 miles (Miami Trace) from the comprehensive high schools.

Table 1

Characteristics of Schools

School	Grade Levels	Total Students	Teachers	Teacher/ Student Ratio	Counselors	Counselor/ Student Ratio	Distance to Voc. Schools	
							Miles	Time
1. Colonel White	9-12	1,441	85	1 to 17	4	1 to 360	2	10 min
2. Tri-County North	9-12	350	24	1 to 15	1	1 to 350	10	20 min
3. East Clinton	9-12	425	26	1 to 16	1	1 to 425	12	15 min
4. Miami Trace	9-12	850	63	1 to 13	3	1 to 283	25	30 min
5. Hamilton	10-12	1,900	110	1 to 17	6	1 to 317	0	0

Additional information is known about the 11th grade class in the schools selected to participate in this study. Table 2 shows the size of the 11th grade class from each school. Tri-County North has the smallest 11th grade class, while Hamilton has the largest. The non-vocational, 11th grade students who completed questionnaires totaled 633 students. Tri-County North supplied 44 respondents, while Hamilton supplied 314. Many students from the 11th grade class elected to enroll into vocational programs at joint vocational schools, career centers or in the vocational buildings adjacent to the comprehensive school. Eleven students left Colonel White to attend a different vocational school, while 225 students were enrolled in a vocational curriculum at Hamilton.

Table 2
Characteristics of 11th Grade Class

	Total Population	Sample Respondents		Attending Vocational School
	f	f	%	f
1. Colonel White	354	108	31%	11
2. Tri-County North	88	44	50%	38
3. East Clinton	105	63	60%	23
4. Miami Trace	229	104	45%	46
5. Hamilton	620	314	51%	225
Totals	1,396	633	45%	344

Curriculum Choice

Students enrolled in the 11th grade class were sorted by curriculum choice. Refer to Table 3 for the breakdown of students by curriculum choice. Vocational students were not surveyed. The remaining two curriculum choice categories were academic (college preparatory) and general. Refer to "Curriculum Choice Classification Guidelines" in Appendix A for definitions of the three curriculums. Sixty percent of the sample were enrolled in an academic curriculum, while 40% were enrolled in a general curriculum. Most of the five schools followed the same pattern of enrollment within the two curriculums. Tri-

County North differed slightly, with 55% enrolled in the academic curriculum and 45% enrolled in the general curriculum.

Table 3

Students' Curriculum Choice

Curriculum Choice	Colonel White f	Colonel White %	Tri-County North f	Tri-County North %	East Clinton f	East Clinton %	Miami Trace f	Miami Trace %	Hamilton f	Hamilton %	Total f	Total %
Academic	62	57%	24	55%	39	62%	60	58%	192	61%	377	60%
General	46	43%	20	45%	24	38%	44	42%	122	39%	256	40%
Total	108	100%	44	100%	63	100%	104	100%	314	100%	633	100%

Sex

Table 4 shows the sex of the students in the sample.

Fifty-three percent of the sample was female, while 47% was male. Each of the five schools had similar breakdowns in the percentages of males and females.

Table 4

Students' Sex

Sex	Colonel White f	Colonel White %	Tri-County North f	Tri-County North %	East Clinton f	East Clinton %	Miami Trace f	Miami Trace %	Hamilton f	Hamilton %	Total f	Total %
Female	57	53%	24	55%	31	49%	50	48%	172	55%	334	53%
Male	51	47%	20	45%	32	51%	54	52%	142	45%	299	47%
Total	108	100%	44	100%	63	100%	104	100%	314	100%	633	100%

Race

Student's race was tabulated (Table 5) indicating that 80.3% of the sample are White (Caucasian), 17.1% are Black and 2.6% are in a category labeled other. Races in this category included: Hispanic, Asian and Native American. Colonel White is a predominately Black school, with 69% Black, 24% White and 7% other. The remaining four schools are predominately White.

Table 5

Students' Race

Race	Colonel White f	%	Tri-County North f	%	East Clinton f	%	Miami Trace f	%	Hamilton f	%	Total f	%
White	26	24%	43	98%	62	99%	102	98%	275	87.5%	508	80.3%
Black	75	69%	1	2%	0	0%	2	2%	30	9.6%	108	17.1%
*Other	7	7%	0	0	1	1%	0	0	9	2.9%	17	2.6%
Total	108	100%	44	100%	63	100%	104	100%	314	100%	633	100%

*Includes Hispanic, Asian, Native American and Other.

Socioeconomic Status

Students in the sample were further described according to their socio-economic status (SES). This was determined by obtaining a composite score based upon the parents' education, occupation, income and household possessions owned.

Living Arrangements

Students were asked if they lived with their father/male guardian. Seventy-five percent (474 students) of the sample lived with their father. Twenty-five percent (155 students) of the sample indicated they did not live with their father/male guardian.

Ninety-two percent (584 students) of the sample lived with their mother/female guardian. Eight percent (47 students) did not live with their mother/female guardian. If a student did not live with their mother/female guardian or father/male guardian, the student did not respond to the questions concerning the parents' education or occupation.

Parents' Educational Level

Those who resonded to the question concerning the educational level of their parents indicated that 39% of the mothers/female guardians of students had only graduated from high school. Table 6 shows that five percent of the mothers/female guardians had obtained an advanced degree, such as a M.S. or Ph.D.

Twenty-five percent of the fathers/male guardians had only graduated from high school, while seven percent had obtained advanced degrees.

Table 6

Parents' Educational level

	Mother/Female Guardian		Father/Male Guardian	
	f	%	f	%
Less than High School Graduation	61	10%	59	9%
High School Graduation Only	246	39%	157	25%
≥ 2 years Post-secondary	135	21%	110	17%
Finished College	45	7%	52	8%
Masters or Ph.D. Degree	31	5%	42	7%
Don't Know or Missing	115	18%	213	34%
Totals	633	100%	633	100%

Parents' Occupations

Those who reported their parents' occupations described the jobs according to the following classifications listed in Table 7.

Table 7

Parents' Occupations

	Mother/Female Guardian		Father/Male Guardian	
Titles	f	%	f	%
Clerical	121	19%	4	0.6%
Craftsman	12	2%	69	11%
Farmer	0	0%	13	2%
Laborer	5	0.8%	35	6%
Manager	29	5%	66	10%
Operator	34	5%	75	12%
Professional (Accountant, Artist,etc)	59	9%	37	6%
Professional (Clergy, Dentist, etc)	10	2%	19	3%
Owner of Business	12	2%	21	3%
Protective Service	4	0.6%	15	2%
Sales	14	2%	20	3%
School Teacher	41	7%	12	2%
Service	42	7%	8	1%
Technician	18	3%	36	6%

Other occupations listed on the questionnaire (homemaker, military) or the category "never worked" or "don't know" were not given a numeric score when calculating SES. Refer to Appendix E for the numerical coding system used for parents' education and occupation.

Parents' Income

Students reported the following concerning the family income for a year. Table 8 shows the income categories. Many of the students (40%) did not know or did not indicate a response for this question. Of those who selected an income category, 31% indicated that the family income was $35,000 or more per year.

Table 8

Family Income

	f	%
$19,999 or Less	53	8%
$20,000 to $34,999	131	21%
$35,000 or More	199	31%
Don't Know	250	40%
Total	633	100%

Household Possessions

Another indicator of SES was the quantity of household possessions owned. Students reported household possessions in Table 9. The most frequently owned possession was a color TV, with 98% of the students having one in their home. The compact disc player was the least popular possession, with 16% having one in their home.

Table 9

Household Possessions

Item	f	%
Place to Study	423	67%
Daily Newspaper	509	80%
Encyclopedia	538	85%
Typewriter	460	73%
Electric Dishwasher	296	47%
2 or More Cars	524	83%
More than 50 Books	518	82%
Own Room	541	86%
Pocket Calculator	596	94%
Color TV	617	98%
Microcomputer	248	39%
Video Tape Recorder	507	80%
Compact Disc Player	104	16%

Socioeconomic Scores

The computed socioeconomic (SES) scores were arranged into quartiles. A student in the first quartile has a low SES. That is, the students' parents had little education, a lower status job, low income and few household possessions. The parents may have not graduated from high school, be employed as a laborer, earn less than $19,999 per year, and not own a number of household items included on the questionnaire.

A student in the fourth quartile has a high SES. That is, the students' parents had many years of education, a high status job, high income and many

household possessions. The parents may have an advanced professional degree (Ph.D. or Masters), be employed as a professional (dentist, physician), earn more than $35,000, and own many of the household items included on the questionnaire.

Table 10 shows the four categories for SES. The total sample was divided into quartiles. The students attending Colonel White High School had higher SES scores than students from the other four schools. Students at East Clinton had lower SES scores. The range of SES values was from -1.60 to 1.81.

Table 10

Students' Socioeconomic Status

SES Quartiles	Colonel White		Tri-County North		East Clinton		Miami Trace		Hamilton		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
1	15	23%	6	20%	14	29%	23	28%	58	24%	116	25%
2	11	16%	9	30%	17	35%	22	27%	58	24%	117	25%
3	15	23%	7	23%	10	21%	24	29%	61	25%	117	25%
4	25	38%	8	27%	7	15%	13	16%	64	27%	117	25%
Totals	66	100%	30	100%	48	100%	82	100%	241	100%	467	100%

Range of Values

1	-1.60 to -.388
2	-0.389 to .028
3	0.029 to .540
4	0.541 to 1.81

Reasons for Not Enrolling in Vocational Education

The 633 students in the sample were asked to respond to an open-ended question concerning their reasons for not enrolling in a vocational education class. Students could list as many reasons as they desired. When the data were analyzed, there were 762 reasons listed. The reasons were categorized. Eighteen categories were developed and are listed below, along with direct student quotes and the percent of responses in each category.

1. **It did not have what I'm interested in.**
   "I found it not satisfactory to my needs and it didn't have what I wanted." "They do not offer the classes I am interested in taking for my future career." "My main interests lie within the advancement of the mind in a more strict educational sense."

   26%

2. **I want to go to college.**
   "I plan to go on to college and the vocational program takes away from the subjects needed to go on." "I am not interested in Vocational Education because I plan to go to college."

   25%

3. **Vocational education does not meet college requirements.**
   "I could not get all the required college prep classes." "I never thought about it cause it doesn't prepare you for college." "If I took vocational I would not be able to take my required courses for college."

   8.5%

4. **There were scheduling problems.**
   "I didn't have room for one in my schedule." "No room in my schedule because of college prep."

   8%

5. **I did not want to change schools.**
   "Liked school here better."

   5%

6. **No reason. I never thought about it.**
   "I don't think about it cause I might get a headrush or something."

   4%

7. **I have a poor image of vocational students.**
   "I do not wish to associate with a various and sundry assortment of yard apes. I'd rather associate with several small species of furry animals gathering together in a cave and grooming with a pick." "Vocational students are scummies and druggies."

   3.5%

8. **I just did not want to go.**

   3%

9. **There was a lack of information about vocational education.**
   "I did not have any idea what vocational was about until the 11th grade." "I was really never given the option to enroll in vocational classes and I do not know much about it."

   2.4%

10. **Vocational education classes are too easy and/or not challenging.**
    "Anyone can pass. JVS classes are almost set up to the effect, A for doing some work, B for showing up, C for making it to half the class, and D for not coming at all."

    2%

11. **Vocational education is too difficult.**
    "My grades were not good enough to get in."

    2%

12. **I plan to attend vocational education.**

    2%

13. **Vocational education narrows my career choices.**
    "I'm not going to vocational school it leaves my future options open to do what I want." "I'd rather spend my time making the grades I need for other jobs than just one type of job."

    1.5%

14. **My parents advised me against enrolling in vocational education.**
    "Parents said no because of drugs."

    1.5%

15. **I have a poor image of vocational schools.**
    "To me it's better to have a real schooling than some trade school that's a waste of time.

    1.4%

16. **My counselor advised me against enrolling in vocational education.**
    "Not suggested by my counselor."

    0.8%

17. **I should have enrolled in vocational education.**

    0.8%

18. **Vocational educat is a waste of time.**

    0.6%

Table 11 summarizes 16 reasons for not enrolling in vocational education, presented to students on the questionnaire. Students were to indicate the extent of agreement with each statement. They could indicate from among the following categories: strongly agree, agree, ?, disagree, strongly disagree or not applicable. The responses were coded 5 for strongly agreed along a continuum to 1 for strongly disagree. Not applicable was coded as missing data.

Table 11

Reasons for Not Enrolling in Vocational Education

Rank Order	Reasons	Mean
1.	I plan to go to college.	4.11
2.	I never thought of it.	3.32
3.	I did not want to become a member of a vocational youth organization.	3.24
4.	My image of the quality of vocational education.	3.11
5.	It would limit my career choice.	3.10
6.	Scheduling problems prevented me from enrolling.	2.76
7.	Comments I have heard from other students.	2.72
8.	My image of the quality of vocational teachers.	2.65
9.	The low ability of vocational students.	2.57
10.	Comment from other teachers.	2.52
11.	Associating with vocational students.	2.46
12.	Graduation requirements.	2.41
13.	Vocational students are problem students.	2.32
14.	Vocational courses were never presented as an option.	2.24
15.	Cost prohibitive.	2.12
16.	Courses are too difficult.	1.69

The most popular reason for not enrolling in vocational education was that the student planned to go to college. Of the reasons presented on the questionnaire, the least popular reason was that the courses were too difficult.

Reasons for Not Enrolling in Vocational Schools

Table 12 lists the reasons students do not enroll in vocational schools (JVS). The 314 students at Hamilton did not respond to this question since it did not apply. Eleven reasons were presented to the students. They were asked

to indicate the extent of agreement with each item. The categories included: strongly agree (coded 5), agree (coded 4), ? (coded 3), disagree (coded 2), strongly disagree (coded 1) and not applicable (coded as missing data). The most popular reason for not enrolling at a JVS was that students felt their current school would better prepare them for college. The least popular response was that it was too difficult to get to the JVS every day.

Table 12

Reasons for Not Enrolling in a Vocational School (JVS)

Rank Order	Reasons	Mean
1.	This school will better prepare me for college.	3.76
2.	I just never thought about attending.	3.46
3.	Did not offer programs I wanted to take.	3.24
4.	I would not be able to participate in extracurricular activities in my home school.	3.04
5.	The image of the JVS in my community.	3.00
6.	Because I would have to go to the JVS.	2.88
7.	Associating with students from the vocational school.	2.83
8.	I would not be able to participate in sports in my home school.	2.70
9.	I was too loyal to this school.	2.63
10.	School dismisses too late in the day.	2.38
11.	Too difficult to get to the JVS every day.	2.12

Thoughts About Vocational Education

Students were asked to respond to an open-ended question regarding their thoughts when they think about vocational education. The 633 students could list as many thoughts as they wished. There was a total of 592 thoughts listed. They were categorized into positive, negative and neutral thoughts. Forty-six percent of the thoughts were positive, forty-three percent were negative and eleven percent were neutral. The categories are listed below, along with student quotes and percentages in each category.

Thoughts When I Think About Vocational Education

Positive (46%)

1. **Vocational education is fine for students who do not go on to college.**
"I don't think bad of the vocational education. I think it's a great place to go if you're not going to college." "Great alternative for those who don't plan to go to college." "I think it is a very good idea. Anyone who knows they will not go to college should be strongly urged to pursue a vocational education."

16%

2. **Vocational education provides a good learning experience and opportunity.**
"As something that helps you to broaden your horizons."
"Vocational Education gives experience to those that have no experience."

8%

3. **Vocational education trains students for a specific type of career.**
"I think that it is great cause it helps you for a working career."

6%

4. **Vocational education helps a student become better qualified for a career.**
"A place where you go to learn more about your career."

4%

5. **I want to or plan to take vocational education courses.**
"I like it because the vocational program I am in next year helps me with career choice." "I am going into a program next year, my counselor said it was easy." "I would love to be in a vocational program but I have classes to make up."

4%

6. **Vocational education prepares students for a career directly after high school.**
"I think it's a good program for students who want to be specially trained for a good job right out of high school."

3%

7. **Vocational education could help you in the future.**
"Something that could help with the future."

3%

8. **Vocational education is interesting, fun or exciting.**
"Fun and a way of learning without really having to pay for it."

1%

Negative (43%)

1. **Vocational education is alright for some people, but it is not for me.**
"It's OK for some people but not for me."
"It seems to have a lot of benefits but the people and the place are not for me."

10%

2. **Vocational education is for troublemakers. It has a bad reputation and poor image.**
"A bunch of freaks, addicts and future criminals." "I think of below average students with learning deficiencies. I usually think of vocational school as somewhat of a pre-delinquent holding center." "I think of all the guys with black T-shirts welding something and a bunch of girls in too tight Jordache jeans sitting behind secretary desks." "I think of black concert T-shirts, chains, and bleached hair with roots. I'm not a snob but vocational students have threatened my life more than once."

9%

3. **Vocational education did not interest me.**

7%

4. **Vocational education is the easy way out. It is not challenging. It is too easy.**
"I think it's just an easy way out for those who can't handle real classes." "I didn't want to go there because I wanted something more challenging. I don't think it is challenging enough."

5%

5. **Vocational education limits your knowledge about other career choices.**
"Studying on specific vocational course limits your knowledge about other careers." "It limits your options for the future."

3%

6. **Vocational education is like working for half a day and then taking classes for half a day.**
"Kids who go to school half a day and work half a day. I assume they need the money."

2%

7. **Vocational education is a waste of time.**

2%

8. **Vocational education is for low income, low intelligence students.**
"Students who can't afford to go to college or don't have good enough grades."

2%

9. **Vocational education does not offer courses required for college preparation.**
"If you are going to college to be a lawyer or something where you need many credits and certain requirements, it limits your credits in more subjects."

2%

10. **Scheduling of vocational education is a problem.**
"After being accepted and enrolled, it was going to be too many problems, such as scheduling."

1%

11. **Vocational education classes are too difficult.**
"I just feel that some of their courses are too difficult for people to learn."

1%

Neutral (11%)

1. **I never thought much about vocational education.**

7%

2. **Vocational education reminds me of vocational agriculture and farming.**
"Farmers being bored and discussing the eatable parts of a cow in a room." "I think of the students who are involved in FFA and wear their jackets everywhere."

3%

3. **I do not know anything about vocational education.**
"I really do not know a lot about it."

1%

Thoughts About Vocational Schools

Students were also asked to give their thoughts when they think about joint vocational schools (JVS). Students could list as many thoughts as they wished. The students at Hamilton did not receive this question on their questionnaire since they do not have an opportunity to attend a JVS. Vocational education is offered within the Hamilton High School building complex. Therefore 319 students responded to this question. There were 295 responses. The responses were categorized into positive, negative and neutral categories. Thirty-one percent of the responses were judged to be positive, while forty-nine percent were judged to be negative and twenty percent were judged to be neutral. The categories are listed below, along with student quotes and percentages in each category.

Thoughts When I Think About a Joint Vocational School (JVS)

Positive (31%)

1. **JVS prepares students for a career directly after high school.**
   "They are good for people who want to major in certain skills and get a job quickly once out of school." "People who want to get a job right after high school." "Kids who plan to go to work after High School instead of college."

   7%

2. **JVS provides a good learning experience and career opportunity.**
   "They provide good work experience." "I thought it was very nice and provided a lot of different career opportunities."

   7%

3. **JVS is interesting, exciting, and different from a regular high school.**
   "It seems like it would be fun and interesting. It would definitely be different from high school." "It could be a nice experience to go to JVS than just a regular public school."

   6%

4. **JVS is fine for students who do not go on to college.**
   "I think of it as a place for kids who can't or don't want to get a college education." "Many alternatives to students who don't go to college."

   5%

5. **JVS trains students for a specific type of career.**
"It's a good idea for those going into a trade." "I think about the students concentrating their studies toward one occupational goal."

3%

6. **JVS is a nice place. It is unique.**
"I think it is nice cause of what they do."

3%

Negative (49%)

1. **The JVS is for troublemakers. It has a bad reputation and poor image.**
"Only people that go there are bums. The ones I know that go there are hoods and if you go there you are automatically looked upon as scum." "A place to get any kind of drugs that you like." "The students there sort of have a bad reputation among other students at their home school for being druggies and troublemakers."

18%

2. **The JVS is alright for some people, but it is not for me.**
"A lot of programs at the JVS are very good but they are not for me." "Nice place to visit but I wouldn't want to go there for school."

12%

3. **The JVS is the easy way out. It is not challenging. It is too easy.**
"It allows people to get high grades by doing no work." "Really easy courses. Plenty of free time. I think of it as an easy way to get through high school."

5%

4. **The JVS did not have what I am interested in.**
"JVS did not have anything for me to do to help me become a doctor." "A lot of options but none that interest me."

5%

5. **The JVS is for low income, low intelligence, underachieving students.**
"It is for less intellectually minded students. It is wonderful to help underachievers to achieve a place in society." "Only low income and not so bright students go there."

2.5%

6. **The JVS does not allow me to have enough time to be with my friends and activities.**
"Not enough time for extracurricular activities."

2%

7. **The JVS is too difficult.**
   "I thought I could make it at the JVS but it tricked me."
   1.5%

8. **There are transportation and scheduling problems involved in attending the JVS.**
   "It's hard getting from place to place."
   1%

9. **The JVS does not offer courses required for college preparation.**
   "Doesn't prepare you for college."
   1%

10. **The JVS limits my exposure to other types of careers. Limits my career choice.** "I know the JVS helps train students for particular career fields but I feel that what is the use of training for just one career, you ought to have something to fall back on and for that you need a college education."
    1%

Neutral (20%)

1. **I never thought much about attending the JVS.**
   "I don't think about it."
   15%

2. **I do not know anything about the JVS.**
   "I don't know enough about JVS." "I don't know what JVS means."
   5%

Image of Vocational Education

Students' image of vocational education was described by a composite score, taking 14 of the 16 items from the list of reasons for not enrolling in vocational education. Refer to the questionnaire found in appendix D for the items. Items d and e were excluded in computing image scores. Students responded whether they strongly agreed, agreed, were unsure (?), disagreed or strongly disagreed with these reasons. Those who strongly agreed with the reasons (higher composite scores) were judged to have a negative image of vocational education. Those responding that they strongly disagreed (lower composite score) were judged to have a positive image of vocational education.

Table 13 shows that 55% of the students indicated that they had neither a positive nor negative image of vocational education. The rest of the sample tended to disagree with the statements, indicating they had a more positive image of vocational education.

Table 13

Students' Images of Vocational Education

	Colonel White		Tri-County North		East Clinton		Miami Trace		Hamilton		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	1	1%	2	5%	0	0	0	0	2	1%	5	1%
Disagree	36	34%	12	29%	19	31%	20	19%	106	34%	193	31%
?	56	53%	22	54%	40	64%	62	60%	162	52%	342	55%
Agree	12	12%	5	12%	3	5%	19	19%	35	11%	74	12%
Strongly Agree	0	0	0	0	0	0	2	2%	5	2%	7	1%
Totals	105	100%	41	100%	62	100%	103	100%	310	100%	621	100%

Of the five schools, Miami Trace students tended to have a more negative image of vocational education. Table 14 indicates the mean scores for the composite image scores and the number of students responding.

Table 14

Students' Images of Vocational Education

	Colonel White	Tri-County North	East Clinton	Miami Trace	Hamilton	Total
Mean	2.70	2.75	2.75	3.02	2.72	2.77
Standard Deviation	.60	.64	.48	.64	.66	.64
Cases	105	41	62	103	310	621

Image of Vocational Schools

Four of the five schools offer students an option to enroll in vocational education at a JVS. Students attending Hamilton High School enroll in vocational education classes only at their school. These students did not respond to this portion of the questionnaire, since it was inappropriate. Students at the remaining four schools were asked to respond to a set of reasons for not enrolling in a vocational school (JVS). Students' images were described by computing a composite score. Students responded to whether they strongly agreed, agreed, were unsure (?), disagreed or strongly disagreed to a set of nine reasons for not enrolling in vocational schools. The items can be found in the questionnaire in appendix D. Items c and e were excluded when calculating the composite score. Those who strongly agreed, (higher composite scores) were judged to have a negative image of vocational schools. Table 15 shows that fifty percent of the sample indicated they had neither a positive nor negative image of vocational schools. Twenty-four percent of the sample tended to agree with the statements, indicating they had a more negative image of vocational schools. Of the four schools, students attending Miami Trace held the most negative image toward vocational schools. Students at Tri-County North held the least negative image of vocational schools.

Table 15

*Students' Images of Vocational Schools

	Colonel White		Tri-County North		East Clinton		Miami Trace		Total	
	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	5	5%	0	0	0	0	0	0	5	2%
Disagree	23	24%	16	38%	9	15%	10	10%	58	19%
?	56	57%	21	50%	32	53%	41	41%	150	50%
Agree	12	12%	4	10%	15	24%	43	43%	74	24%
Strongly Agree	2	2%	1	2%	5	8%	6	6%	14	5%
Totals	98	100%	42	100%	61	100%	100	100%	301	100%

*Hamilton students did not respond. JVS equivalent at Hamilton.

Table 16 indicates the mean scores for the composite image scores and the numbers of students responding.

Table 16

Students' Images of Vocational Schools (JVS)

	Colonel White	Tri-County North	East Clinton	Miami Trace	Total
Mean	2.78	2.76	3.27	3.44	3.10
Standard Deviation	.73	.63	.74	.73	.78
Cases	98	42	61	100	301

Experiences at Vocational Schools

On the questionnaire, students from four of the five schools were asked whether they had ever attended classes at a vocational school (JVS) on a regular basis. This was to determine if some of the students may have been enrolled in previous years, or earlier in the school year and returned to their home school. Seven percent (23 students) responded that they had previously been enrolled on a regular basis. Ninety-three percent (295 students) indicated they had not

previously been enrolled.

Students from four of the five schools were also asked if they had toured a JVS prior to their junior year of high school. Sixty-four percent (204 students) said yes. Thirty-six percent (114 students) said no.

Future Occupations

Students were asked on the questionnaire to indicate if they had selected their future occupation. Sixty-four percent (403 students) of the 633 respondents indicated they had selected a future occupation, while thirty-five percent (204 students) indicated they had not. One percent did not respond to this question. Of those who had selected a future occupation, students were asked to specify in writing their future occupation. The respondents could indicate as many responses as they wished.

The occupations that students chose for their future are listed below in order of most to least frequently selected.

Rank Order	Future Occupations	Number of Student Responses
1.	Engineer	44
2.	Teacher	35
3.	Accountant	24
4.	Computer Programer/Operator	21
5.	Military	21
6.	Lawyer/Legal Assistant	20
7.	Business Administrator	20
8.	Psychologist	19
9.	Musical Performer/Theatre	17
10.	Nurse	14
11.	Secretary	12
12.	Writer/Journalist	10
13.	Doctor	9
14.	Social Worker	7
15.	Fashion Merchandiser	7
16.	Pilot	7
17.	Professional Athlete	6
18.	Law Enforcer	6
19.	Architect	6
20.	Veterinarian	6
21.	Physical Therapist	6
22.	Sports Trainer/Sports Medicine	5

23.	Cosmotologist	5
24.	Commercial/Graphic Artist	5
25.	Business Owner	5
26.	Fashion Designer	5
27.	Interior Designer	5
28.	Pharmacist	5
29.	Dentist	4
30.	Automotive Technician	4
31.	Artist	4
32.	Microbiology/Biomedicine Scientist	4
33.	TV/Radio Broadcaster	4
34.	Photographer	3
35.	Cruise Director/Travel Agent	3
36.	Drafter	2
37.	Truck Driver	2
38.	Stockbroker	2
39.	Politician	2
40.	Fashion Model	2
41.	Hotel Manager	2
42.	X-ray Technician	2
43.	Wildlife Manager	2
44.	Realtor	2
45.	Marine Biologist	2
46.	Chemist	2
47.	Advertiser	2
48.	Zoologist	2
49.	Criminal Therapist	1
50.	Letter Carrier	1
51.	Plumber	1
52.	Electrician	1
53.	Songwriter	1
54.	Paramedic	1
55.	Car Repossessor	1
56.	Computer Salesperson & Repair Person	1
57.	Race Car Driver	1
58.	Anthropologist	1
59.	Archeologist	1
60.	Firefighter	1
61.	Heating and Air Conditioning Repair Person	1
62.	Bank Teller	1
63.	Welder	1
64.	Machine Operator	1
65.	Diesel Mechanic	1
66.	Housewife	1
67.	Speech Therapist	1
68.	Dermatologist	1
69.	Banker	1
70.	Paramedic	1
71.	Robotics Technician	1
72.	Nutritionist	1
73.	Buyer	1

Relationships Between Students' Characteristics and Students' Images of Vocational Education and Vocational Schools

The relationships between four student characteristics: 1) sex, 2) curriculum choice, 3) race and 4) socioeconomic status (SES) and students' images of vocational education and vocational schools (JVS) were explored. Reasons students do not enroll in vocational education and vocational schools are based on students' images. Two measures of students' images were explored in order to define the reasons for not enrolling. The measures were obtained from questions on the student questionnaire. A 5-point Likert scale was used with a 5 indicating they strongly agreed with the statement, while a 1 indicated they strongly disagreed. Higher scores indicated that the student had a poorer or more negative image of vocational education or vocational schools. That is, if they strongly agreed that the reason listed on the questionnaire was a factor in not enrolling, then they had a poorer image of vocational education or vocational schools.

Sex

Table 17 shows the mean scores, standard deviations and analysis of variance for students' images of vocational education and vocational schools by sex. There was a statistically significant ($p < .05$) difference in mean scores between males' ($\bar{X} = 2.84$) and females' ($\bar{X} = 2.71$) images of vocational education That is, males had a more negative image of vocational education than did females. Even though statistically significant, the reader must be cautioned on interpreting the practical significance. The low relationship (Eta = .11) indicates that only one percent of the variance in image score is explained by sex.

When looking at students' images of vocational schools, males again had a higher mean score ($\bar{X} = 3.11$) than did females ($\bar{X} = 3.08$), however, the difference was not statistically significant.

Table 17

Relationships Between Students' Sex and Image of Vocational Education and Vocational Schools

	Sex	
Image of Vocational Education	Female	Male
n	327	294
Mean	2.71	2.84
Standard Deviation	.65	.62

Source	df	SS	MS	F	p
Between Groups	1	2.90	2.90	7.20	.008
Within Groups	619	248.97	.40		
Total	620	251.87			

Eta = .11

	Sex	
Image of Vocational Schools	Female	Male
n	155	146
Mean	3.08	3.11
Standard Deviation	.80	.76

Source	df	SS	MS	F	p
Between Groups	1	.09	.09	.15	.70
Within Groups	299	181.81	.61		
Total	300	181.90			

Curriculum Choice

Table 18 indicates the mean scores, standard deviations and analysis of variance for students' images of vocational education and vocational schools by curriculum choice. Students were classified as either general or academic (college preparatory) curriculum choice.

Students following an academic curriculum had a higher mean (a more negative image of vocational education) ($\bar{X}$ = 2.88) than the students in a general curriculum ($\bar{X}$ = 2.61). There was a statistically significant difference in mean scores between general and academic curriculum choice students on images of vocational education. Students in an academic curriculum tended to have a poorer image of vocational education than did students in a general curriculum.

The practical significance is indicated by the low relationship (Eta = .21). The low relationship indicates that four percent of the variance in the image scores is explained by curriculum choice.

Table 18

Relationship Between Students' Curriculum Choice and Image of Vocational Education and Vocational Schools

	Curriculum Choice	
Image of Vocational Education	Academic	General
n	372	249
Mean	2.88	2.61
Standard Deviation	.64	.60

Source	df	SS	MS	F	p
Between Groups	1	11.14	11.14	28.64	<.001
Within Groups	619	240.72	.39		
Total	620	251.86			

Eta = .21

	Curriculum Choice	
Image of Vocational Schools	Academic	General
n	175	126
Mean	3.21	2.94
Standard Deviation	.78	.75

Source	df	SS	MS	F	p
Between Groups	1	5.26	5.26	8.90	.003
Within Groups	299	176.65	.59		
Total	300	181.91			

Eta = .17

When looking at students' images of vocational schools, again the students in an academic curriculum had a statistically significant more negative image ($\bar{X}$ = 3.21) than students in a general curriculum ($\bar{X}$ = 2.94). The relationship again was low (Eta = .17), indicating little practical significance. Three percent of the variance in the image score is explained by curriculum choice.

Race

Table 19 indicates the mean scores, standard deviations and analysis of variance for students' images of vocational education and vocational schools by race. Black students had a statistically significant difference in mean scores on image of vocational education ($\bar{X}$ = 2.65) than did white students ($\bar{X}$ = 2.80) or from other races ($\bar{X}$ = 2.59). That is, white students had the more negative image of vocational education, followed by black students and students from other races. Even though statistically significant, there is little practical significance with Eta = .11. The Scheffe post hoc test indicated that there wereno two groups significantly different at the .05 alpha level. The low relation-ship indicates that one percent of the variance in the image score is explained by race.

Table 19
Relationship Between Students' Race and Image of Vocational Education and Vocational Schools

Image of Vocational Education	Race		
	White	Black	Other
n	497	107	17
Mean	2.80	2.65	2.59
Standard Deviation	.65	.55	.65

Source	df	SS	MS	F	p
Between Groups	2	2.78	1.39	3.44	.03
Within Groups	618	249.09	.40		
Total	630				

Scheffe post hoc analysis showed no two groups significantly different at the .05 level; Eta = .11.

Image of Vocational Schools	Race		
	White	Black	Other
n	224	70	7
Mean	3.19[a]	2.79[b]	3.08[ab]
Standard Deviation	.77	.73	.62

Source	df	SS	MS	F	p
Between Groups	2	8.68	4.34	7.46	.001
Within Groups	298	173.22	.58		
Total	300				

Scheffe; Eta = .22
Means with the same superscript do not differ significantly at .05 level.

When looking at students' images of vocational schools by race, there was a statistically significant difference. Black students had a statistically significant difference in mean scores on image of vocational schools ($\bar{X}$ = 2.79) than did white students ($\bar{X}$ = 3.19) or students from other races ($\bar{X}$ = 3.08). That is, white students had a more negative image of vocational schools, followed by students from other races and blacks. Even though statistically significant, there is a low relationship (Eta = .22), warranting caution for the practical significance. Five percent of the variance in image score is explained by race. The Scheffe post hoc test showed that whites and blacks were the two groups that differed significantly.

Socioeconomic Status

Table 20 summarizes the mean scores, standard deviations and analysis of variance for students' images of vocational education and vocational schools by

Table 20
Relationships Between Students' SES and Image of Vocational Education and Vocational Schools

	Socioeconomic Status			
Image of Vocational Education	First Quartile	Second Quartile	Third Quartile	Fourth Quartile
n	114	115	115	116
Mean	2.69[a]	2.76[ab]	2.79[ab]	2.95[b]
Standard Deviation	.61	.65	.65	.59

Source	df	SS	MS	F	p
Between Groups	3	4.05	1.35	3.43	.02
Within Groups	456	179.57	.39		
Total	459	183.62			

Scheffe, Eta = .15

Means with the same superscript do not differ significantly at .05 level

	Socioeconomic Status			
Image of Vocational Schools	First Quartile	Second Quartile	Third Quartile	Fourth Quartile
n	55	59	50	51
Mean	3.02	3.31	3.10	3.26
Standard Deviation	.72	.71	.86	.77

Source	df	SS	MS	F	p
Between Groups	3	2.91	.97	1.66	.18
Within Groups	211	123.20	.58		
Total	214	126.11			

socioeconomic status (SES). SES is categorized by quartiles. The students from the highest socioeconomic background had a statistically significant more negative image of vocational education ($\bar{X}$ = 2.95) than did the students from the lowest socioeconomic background ($\bar{X}$ = 2.69). The practical significance is indicated by Eta = 15, indicating a low relationship. Two percent of the variance in the image score is explained by SES.

When looking at students' images of vocational schools by socioeconomic status, there was not a statistically significant difference between students in any SES quartile.

Influencers on Enrolling in Vocational Education

Table 21 indicates in rank order, the people who most influenced the students when making their decision to not enroll in vocational education. Students were asked to indicate on the questionnaire by responding "yes" or "no" if they had discussed with the people listed their decision to not enroll in vocational education. If the student indicated "yes," that is they had discussed enrolling in vocational education with that person, they were also asked to indicate to what extent they had been influenced by that person. The levels of extent of influence include: did not influence, mild influence, and strong influence. Thirty-two percent of the students indicated that they were not influenced by their mother/female guardian, while 33% were mildly influenced and 35% were strongly influenced.

Table 21
Influencers on Enrolling in Vocational Education

Rank Order	People	f	% Yes	Extent of Influence		
				None	Mild	Strong
1.	Mother/Female Guardian	283	46%	32%	33%	35%
2.	Friend	274	44%	34%	45%	21%
3.	Counselor	241	39%	34%	37%	29%
4.	Father/Male Guardian	236	38%	30%	37%	33%
5.	Brother/Sister	135	22%	29%	36%	35%
6.	Teacher	126	20%	19%	54%	27%
7.	Other Relative	109	18%	22%	44%	34%
8.	Boy/Girl/Friend	102	17%	35%	43%	22%
9.	Athletic Coach	32	5%	19%	32%	49%

The mother/female guardian was the most influential person. Forty-six percent of the respondents indicated that they had discussed their decision to not enroll in vocational education with their mother/female guardian. The least influential person was the athletic coach, with five percent of the students responding that they had discussed their decision with their coach.

Influencers on Enrolling in Vocational Schools

Table 22 indicates in rank order, the people who most influenced the students when making their decision to not enroll in a vocational school (JVS).

Table 22

Influencers on Enrolling in Vocational Schools

Rank Order	People	f	% Yes	Extent of Influence: None	Mild	Strong
1.	Mother/Female Guardian	130	42%	25%	31%	44%
2.	Friend	129	42%	29%	42%	29%
3.	Father/Male Guardian	104	34%	29%	30%	41%
4.	Counselor	76	25%	40%	44%	16%
5.	Brother/Sister	68	22%	25%	36%	39%
6.	Other Relative	47	15%	18%	48%	34%
7.	Boy/Girl Friend	44	14%	20%	53%	27%
8.	Teacher	37	12%	26%	54%	20%
9.	Athletic Coach	13	4%	8%	50%	42%

Students at Hamilton did not receive this question on their instrument, because they do not have an opportunity to enroll at a JVS. Students at the four remaining schools were asked to indicate on the questionnaire by responding "yes" or "no" if they had discussed with the people listed their decision to not attend the vocational school. If the student indicated "yes," that is they had discussed enrolling in a vocational school with that person, they were also instructed to indicate the extent to which they had been influenced. The levels of extent include: did not influence, mild influence and strong influence. The mother/female guardian was consulted most frequently. Forty-two percent of the

respondents indicated that they had discussed their decisions to not enroll in a vocational school with their mother/female guardian. Forty-four percent of the students who indicated that their mother/female guardian was an influencer felt that she was a strong influencer. The least influential person was the athletic coach, with only four percent of the students responding that they had discussed their decision with the coach.

Parent Interview Response: Parents' Images of Vocational Education

In order to determine the parents' images of vocational education a telephone interview was conducted on a random sample of 16 parents. Nine parents were from Hamilton, 3 from Colonel White, 1 from Tri-County North, 2 from East Clinton and 1 from Miami Trace. One parent, contacted by telephone did not agree to participate. Each of the 15 participating parents was asked to respond to ten questions as follows:

1. What are your feelings about vocational education?
2. Describe the typical vocational student. What are they like?
3. Does your son/daughter's school offer vocational education as a curriculum choice?
4. Do you feel that it is cost prohibitive to send your child to a vocational program?
5. Has your son/daughter decided what he/she wants to be when he/she grows up?
6. To what extent do you feel that you or your spouse influenced your child to select a high school curriculum?
7. Who or what influences students to select their curriculums?
8. Are you aware of any activities sponsored by the school to look at what vocational education is all about?
9. Have you personally ever visited a school offering a vocational program?
10. Why do you feel that your child has decided not to enroll into a high school vocational curriculum?

Either the mother/female guardian or father/male guardian was asked the above set of questions. Students filled out a survey as part of the student questionnaire in order to provide names, phone numbers and best times to call their parents. The calls were made the month following data collection.

Parent Responses

Question 1. What are your feelings about vocational education?

#Responses

2 I have a favorable feeling about vocational education.
2 It is well suited to some types of students.
2 It can benefit the students who do not plan to go to college.
1 I have not thought about it.
1 It is for students interested in the classes they offer.
1 I do not know what vocational education is.
1 It is fine for those who have already made their career choice and know what direction they want to go.
1 It is for kids who want to go to college.
1 It is important.
1 It is for below average students.

Question 2. Describe the typical vocational student. What are they like?

#Responses

Kids other than college preparatory.
They are smarter than we give them credit for.
They get a better start on a good paying job.
I have no negative image of them.
Works well with his hands and is interested in manual labor.
They are not qualified for college but still want to get an education and a job.
Ambitious and hardworking.
Average students who want to get a job.
Students who do not want to go to college, but want a job.
Students who can't make the grade in college.
I do not know.
They are work oriented, not school oriented.
They are average.
They are students who do not like to work in school.
They want to learn a trade and end up with a good job.
They like things that keep them interested.
Practical and ready for a job.

Question 3. Does your son/daughter's school offer vocational education as a curriculum choice?

#Responses

9 Yes
4 No
1 Not sure
1 Do not know

(In actuality, each of the five schools in the sample did offer courses in vocational education.)

Question 4. Do you feel that it is cost prohibitive to send your child to a vocational program?

#Responses
- 4 Yes
- 11 No

Question 5. Has your son/daughter decided what he/she wants to be when he/she grows up?

#Responses
- 9 No
- 6 Yes

Occupations
- 2 Teacher
- 2 Nurse
- 1 Scientist

Question 6. To what extent do you feel that you or your spouse influenced your child to select a high school curriculum?

#Responses
- 7 Great extent
- 3 Little influence
- 2 Let child make his/her own choice
- 1 Quite a bit
- 1 We never discussed it

Question 7. Who or what influences students to select their curriculums?

#Responses
- 8 Parents
- 7 Teachers
- 7 Friends
- 2 Other Family Members
- 2 Counselor
- 1 No one person or thing

Question 8. Are you aware of any activities sponsored by the school to look at what vocational education is all about?

#Responses

14 No

1 Yes

Question 9. Have you personally ever visited a school offering a vocational program?

#Responses

8 No

7 Yes

Question 10. Why do you feel that your child has decided not to enroll into a high school vocational curriculum?

#Responses

5 Because he/she is going to college.
4 I do not know.
1 They had nothing that interested him.
1 Her friends were not in vocational classes.
1 He did not want to leave his home school.
1 He is very smart and strong minded.
1 Attitude of kids who take vocational classes.
1 He never gave reason why.

SUMMARY IMPLICATIONS AND RECOMMENDATIONS

Purpose and Objectives

The purpose of this study was to investigate factors that influence a student not to enter into a high school vocational curriculum. Due to declining enrollment in vocational education programs, it is necessary to identify reasons why students are not enrolling. The specific objectives of this study were:

1. To describe the characteristics of the schools (ratio of guidance counselor to students, student enrollment, teacher enrollment, teacher-student ratio, distance to a vocational school, number of teachers, number of counselors) selected in the sample.
2. To describe the characteristics (sex, race, socioeconomic status, curriculum choice-general or college preparatory) of the students who chose not to enroll into a high school vocational curriculum.
3. To describe the reasons students give for choosing not to enroll into a high school vocational curriculum.
4. To describe students' images of vocational education, and vocational schools.
5. To determine the relationships between student characteristics and reasons for not choosing to enroll into a high school vocational curriculum.
6. To determine who influences a student to make a decision about enrolling into a high school curriculum.
7. To describe parents' images of vocational education.
8. To describe the parents' perceptions of why their child chose not to enroll into a high school vocational curriculum.

Limitations of the Study

The results of this research can only be generalizable to non-vocational 11th grade students in the Southwest Ohio Region Personnel Development Center. Since a random sampling procedure was utilized, we can generalize to the population located in the Region.

Upon answering the open-ended questions on the student instrument there may have been prompting for students' responses due to the design of the questionnaire. Since a list of potential reasons for not enrolling in vocational education and vocational schools was provided, students may have been more likely to cite some of these reasons as their response on the open-ended questions.

Methodology

A random sample of five high schools was selected from a sample of high schools (not including JVS's). All 11th grade, non-vocational students in the five schools were surveyed. Students were identified by curriculum choice (academic or general).

A student instrument was developed, validity checked, field tested, pilot tested and reliability tested. Questionnaires were personally administered by the researcher and research assistants. A random sample of 16 parents were interviewed by telephone in order to determine their images of vocational education and reasons their son/daughter was not enrolled in vocational curriculum. Ten questions were asked during the interview. A demographic survey was mailed to the schools in order to collect descriptive information about the schools.

Sample Selected

Five high schools were selected at random from the population of schools in the Southwest Ohio Region Personnel Development Center. These schools were Hamilton, Colonel White, East Clinton, Tri-County North and Miami Trace. There were 633 students in the sample who completed the questionnaire.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). The primary methods of statistical analysis for the questionnaire included: descriptive, correlational and analysis of variance. For the open-ended responses, data were analyzed by summarizing the responses into categories and tallying the frequencies by hand. The interviewer took notes during the parent interview. The responses to each question were summarized.

Summary of Findings

School and Student Characteristics

In order to describe the five schools in the sample, descriptive data were collected. Two schools (Colonel White and Hamilton) are large city schools, while the remaining schools are smaller rural schools. The enrollment in the five schools varied from 350 to 1,900 students. Teacher-student ratios varied from 1 to 13 (Miami Trace) to 1 to 17 (Colonel White and Hamilton). The counselor-student ratios varied from 1 to 283 (Miami Trace) to 1 to 425 (East Clinton). The vocational school serving the schools sampled was as close as next door (Hamilton) to as far away as a thirty minute drive (Miami Trace).

The 633 students in the sample were from five schools. Colonel White (108 students), Tri-County North (44 students), East Clinton (63 students), Miami Trace (104 students), Hamilton (314 students). Sixty percent of the sample were enrolled in an academic (college preparatory) curriculum. Forty percent were enrolled in a general curriculum. Fifty-three percent of the sample was female. Forty-seven percent was male. The majority of the sample (80.3%) was White (Caucasion), while 17.1% was Black and 2.6% were in a category labeled other. There were differences between the schools on the socioeconomic status of students. A higher percentage of students at Colonel White were in the higher socioeconomic status quartile. A higher percentage of students at East

Clinton were in the lower socioeconomic status quartile.

Reasons for Not Enrolling in Vocational Education

Looking at the open-ended responses to students' reasons for not enrolling in vocational education, the following categories were developed.

Categories (rank order)

1. It did not have what I'm interested in. (28%)
2. I want to go to college. (25%)
3. Vocational education does not meet college requirements. (8.5%)
4. There were scheduling problems. (8%)
5. I did not want to change schools. (5%)
6. No reason. I never thought of it. (4%)
7. I have a poor image of vocational students. (3.5%)
8. I just did not want to go. (3%)
9. There was a lack of information about vocational education. (2.4%)
10. Vocational education classes are too easy and/or not challenging. (2%)
11. Vocational education is too difficult. (2%)
12. I plan to attend vocational education. (2%)
13. Vocational education narrows my career choices. (1.5%)
14. My parents advised me against enrolling in vocational education. (1.5%)
15. I have a poor image of vocational schools. (1.4%)
16. My counselor advised me against enrolling in vocational education. (0.8%)
17. I should have enrolled in vocational education. (0.8%)
18. Vocational education is a waste of time. (0.6%)

Likert scale responses to selected reasons for not enrolling in vocational education include the following top five reasons.

1. I plan to go to college.
2. I never thought of it.
3. I did not want to become a member of a vocational youth organization.
4. My image of the quality of vocational education.
5. It would limit my career choice.

Reasons for Not Enrolling in Vocational Schools (JVS)

Potential reasons for not enrolling in a vocational school were presented to the students. Results of the Likert scale responses show the following top five reasons.

1. This school will better prepare me for college
2. I just never thought about attending.
3. Did not offer programs I wanted to take.
4. I would not be able to participate in extracurricular activities in my home school.
5. The image of the JVS in my community.

Thoughts About Vocational Education

Responses to an open-ended question regarding student thoughts when they think about vocational education were summarized into categories. The responses were judged to be positive (46%), negative (43%) or neutral (11%). The categories and percentages are listed below.

Positive

1. Vocational education is fine for students who do not go on to college. (16%)
2. Vocational education provides a good learning experience and opportunity. (8%)
3. Vocational education trains students for a specific type of career. (6%)
4. Vocational education helps a student become better qualified for a career. (4%)
5. I want to or plan to take vocational education courses. (4%)
6. Vocational education prepares students for a career directly after high school. (3%)
7. Vocational education could help you in the future. (3%)
8. Vocational education is interesting, fun or exciting. (1%)

Negative

1. Vocational education is alright for some people, but it is not for me. (10%)
2. Vocational education is for troublemakers. It has a bad reputation and poor image. (9%)
3. Vocational education did not interest me. (7%)
4. Vocational education is the easy way out. It is not challenging. It is too easy. (5%)
5. Vocational education limits your knowledge about other career choices. (3%)

6. Vocational education is like working for half a day and then taking classes for half a day. (2%)
7. Vocational education is a waste of time. (2%)
8. Voc[illegible]onal education is for low income, low intelligence students. (2%)
9. Vocational education does not offer courses required for college preparation. (2%)
10. Scheduling of vocational education is a problem. (1%)
11. Vocational education classes are too difficult. (1%)

Neutral

1. I never thought much about vocational education. (7%)
2. Vocational education reminds me of vocational agriculture and farming. (3%)
3. I do not know anything about vocational education. (1%)

Thoughts About Vocational Schools (JVS)

Responses to the open-ended question regarding students' thoughts when they think about vocational schools (JVS) were summarized into categories. The responses were judged to be positive (31%), negative (49%) or neutral (49%). The categories and percentages are listed below.

Positive

1. JVS prepares students for a career directly after high school. (7%)
2. JVS provides a good learning experience and career opportunity. (7%)
3. JVS is interesting, exciting, and different from a regular high school. (6%)
4. JVS is fine for students who do not go on to college. (5%)
5. JVS trains students for a specific type of career. (3%)
6. JVS is a nice place. It is unique. (3%)

Negative

1. The JVS is for troublemakers. [illegible]as a bad reputation and poor image. (18%)
2. The JVS is alright for some people, but it is not for me. (12%)
3. The JVS is the easy way out. It is not challenging. It is too easy. (5%)
4. The JVS did not have what I am interested in. (5%)
5. The JVS is for low income, low intelligence, underachieving students. (2.5%)
6. The JVS does not allow me to have enough time to be with my friends and activities. (2%)
7. The JVS is too difficult. (1.5%)

8. There are transportation and scheduling problems involved in attending the JVS. (1%)
9. The JVS does not offer courses required for college preparation. (1%)
10. The JVS limits my exposure to other types of careers. Limits my career choice. (1%)

Neutral

1. I never thought much about attending the JVS. (15%)
2. I do not know anything about the JVS. (5%)

Image of Vocational Education

Students' images of vocational education were measured with a composite score of students' responses to a list of potential reasons for not enrolling in vocational education. Students at Miami Trace tended to have the most negative image. Students at Colonel White had the most positive image.

Image of Vocational Schools (JVS)

Students' images of vocational schools (JVS) were measured with a composite score of students' responses to a list of potential reasons for not enrolling at the vocational school. Students at Miami Trace had the most negative image. Students at Tri-County North had the most positive image.

Student Experiences and Aspirations

Seven percent of the sample had previously been enrolled in a vocational school. Sixty-four percent indicated that they had previously toured a JVS. Sixty-four percent indicated that they had selected a future occupation. The most popular occupations were: engineer, teacher, accountant, computer programmer/operator and the military.

Relationships Between Student Characteristics and Students' Image of Vocational Education and Vocational Schools

When looking at the relationships between student characteristics (sex, curriculum choice, race and socioeconomic status) and their images of vocational education and vocational schools, statistically significant relationships were found. Males tended to have a more negative image of vocational education and

vocational schools than did females. The relationship between sex and students' image of vocational education was low (Eta = .11).

Students following an academic curriculum tended to have a more negative image of vocational education and vocational schools than did students following a general curriculum. Relationships were low between image of vocational education/vocational schools and curriculum choice.

White students held more negative images of vocational education and vocational schools than did black students or students from other races. Relationships were low but statistically significant.

Students with a higher socioeconomic status had a more negative image of vocational education. The relationship however, was low. There was not a statistical difference between SES and image of vocational schools.

Influencers on Enrolling in Vocational Education/Schools

Students reported that they were influenced by others when choosing their high school curriculum. When deciding to not enroll in vocational education, the mother/female guardian was the most influential person, followed by their friends, counselor and father/male guardian.

When deciding not to enroll in a vocational school, the mother/female guardian was the most influential person, followed by friends, father/male guardian and counselor.

Recommendations to Educators

1. High school scheduling should be flexible to allow a student to enroll in a dual vocational and academic curriculum. This could make it easier for an academic student to also enroll in vocational programs.
2. To better serve the college-bound student, vocational courses should be offered for enrichment purposes to better prepare them for a future career. They should be given the chance to explore and investigate a vocational area. Courses in pre-medicine, pre-engineering and pre-accounting could be considered.

3. Administratively, vocational education must be re-designed to allow an academic student the opportunity to take vocational courses for enrichment, exploratory or investigative purposes.

4. New vocational programs should be developed in order to better meet the academic and vocational students' interests.

5. Students in high school need more exposure to career guidance and vocational offerings available. They should be encouraged to make career decisions.

6. Counselors need to take responsibility for assisting students in making career choices. They should work jointly with the parents and student to discuss options.

7. Personnel need to be increased in the high schools to offer vocational guidance and counseling to students.

8. Comprehensive high schools should sponsor tours of the local vocational schools (JVS) for all students prior to or during the sophomore year of high school. Students should be introduced to all program offerings. Opportunity for "hands-on" visits should also be made available for programs that interest the student.

9. The image of vocational education needs to be improved. Information about the benefits of the program needs to be marketed. We need to change the way people look at vocational education. Those people include: parents, students, guidance counselors and teachers.

10. In order to improve images formed of vocational students, a more professional student dress code needs to be enforced. A no smoking policy on campus should also be considered.

11. Include more social and athletic events in joint vocational schools in order to make them more attractive to students from comprehensive schools. (Ex. proms, dances, intramural sports, student government)

12. Increase the amount of publicity for the awards and achievements of the vocational students in the local community. Also emphasize the facts about vocational graduates who continue their education at technical schools, colleges and universities.

13. Administrators need to give more leadership toward the improvement of public relations programs.

14. Make efforts to give information to students and parents that vocational education can serve as a pathway to the work force, technical school or a four year college.

15. Innovative programs could be designed to offer part-time vocational courses as an alternative to full-time programs. These could serve as student electives. Semester and single period courses could be considered.

16. Innovative programs could be designed to allow students an opportunity to enroll for a portion of the vocational program and exist upon meeting their educational needs. A modified open entry--open exit program needs to be developed.

17. Innovative, after school hours, vocational programs, could be offered. This would fit the scheduling needs of the college bound student and the student interested in elective courses. These courses could be useful for career exploration programs for 9th and 10th grade students also.

18. Increased efforts for articulation agreements need to be written, leading to advanced placement in technical schools and four year colleges.

19. Career orientation programs are needed in the junior high school level to ensure the enrollment of all students who desire vocational training.

20. Funding and methods of evaluating the accountability of vocational education will need to be changed. If a new emphasis is to train students to enter college programs, then it is no longer appropriate to evaluate program effectiveness based on job placement data. If vocational education is multi-functional, then evaluations must take into account multiple outcomes. Numerous criteria for evaluation will need to be determined.

21. Increased efforts at marketing vocational education should be made. We need to segment our marketing efforts toward the students and their mothers.

Recommendations for Further Research

1. There is a need to study the future occupational training needs for the U.S. labor force and to survey junior high students to determine their career interests. With this data, administrators will be better prepared to design new program offerings in vocational education.

2. One needs to determine if increased graduation requirements have made a significant impact on enrollment in vocational education.

3. One needs to determine what pre-college vocational courses would be most applicable for future engineers, computer programers/operators, and accountants.

4. It would be useful to explore the mother-child relationship to determine how to use the mothers' influence to encourage enrollment in vocational education. One also needs to determine how she arrives at her images of vocational education.

5. Additional research is needed to study other additional student characteristics of those enrolled in academic and general curriculums.

6. Additional research is needed to determine why a student selects a general curriculum over a vocational or academic curriculum.

7. This study could be replicated in a larger scale in a different state or in a nationwide study. It could also be adapted in a smaller scale for use by individual vocational schools.

8. A similar image study could be designed for students at the 7th and 8th grade level. The purpose would be to determine when images of vocational education are formed and what those images are. A follow-up study on the same 7th and 8th grade students could be taken when they reach the 11th grade to see if images change.

9. A follow-up study on this 11th grade sample could be designed to see if any students enroll in vocational courses during their 12th grade or enroll in a technical school after graduation.

10. One can explore reasons why students enroll in vocational education. The reasons given can be compared with the results of this study.

11. One can study the student characteristics of those currently enrolled in vocational education (grade point average, class rank, socioeconomic status, honors earned). Comparisons can be made between students enrolled in general and academic curriculums.

12. A model needs to be developed in order to administer vocational education for students in dual vocational and academic cur iculums. Further study is needed in order to establish how these programs will be scheduled and delivered.

Discussion

The researcher has made an attempt to describe images that students and parents have of vocational programs in Southwest Ohio. Those images are mixed: positive, negative and neutral. Vocational educators can pat themselves on the back for the words of encouragement offered by the students in this study. After all, 46% (the majority) of the thoughts about vocational education were positive. Another 31% of the thoughts about vocational schools was positive.

On the other hand, there were some negative comments. Stereotypic images of current vocational students do exist. That image is not favorable. Students are even more negative about joint vocational schools and students attending these schools than they are of vocational education in general. Forty-three percent of the thoughts about vocational education were negative while 49% were negative about joint vocational schools. We need to study these negative thoughts under high magnification.

Each one of these negative thoughts is a perceived barrier for students. The barriers toward enrolling in vocational education have clearly been identified. We now need to know if these thoughts are based on the truth about vocational education or merely a false perception.

We should also be troubled by the percent of students holding a neutral image toward vocational education and vocational schools. This indicates a need for marketing efforts to kick in.

Eleven percent of the students' thoughts were judged to be neutral of vocational education, while 20% were judged to be neutral of joint vocational schools. Data support this neutral image when one looks at the percent of students who had toured their participating joint vocational school. Only 64% indicated they had been on a tour. What happened to the remaining 36%? How can an image be formed if the building and programs had not been exposed to them?

Increased marketing efforts and increased public awareness must be implemented in order to target recruitment efforts toward these undecided, neutral thinkers.

This study has also made clear the reasons students are not enrolling in vocation curriculums. The evidence indicates that students who are preparing to go to college perceive that they cannot fit vocational courses into their schedules. They also believe that vocational courses do not prepare them for college. Twenty-eight percent of the students' responses indicate that vocational education offers nothing that interests them. Yet when you ask them what future occupation they have selected, many indicate a profession that they could have prepared for in a high school vocational program. Why did they choose not to enroll?

Perhaps they do not wish to dedicate two years towards that career. Joint vocational schools would have required that commitment. Perhaps they did not wish to limit their career choice at such a young age. Or perhaps they wanted to leave their options open.

Let's go back to the question of interest. What other explanations are there to justify why existing vocational programs are not interesting.

Maybe it's because what we are offering is dull and boring or is presented in that manner. Maybe it's because we are offering programs that train students for boring jobs. Maybe we are training for jobs that no longer exist.

Another possibility exists to answer the question, why aren't students interested in our offerings? Perhaps they never really saw all that vocational schools had to offer. Perhaps they only saw one or two programs when they were on the tour of the vocational school. Perhaps they only saw program brochures on a few offerings. Perhaps they saw nothing and read nothing and use the excuse of a lack of interest as an easy cop-out answer. Perhaps we will never know the answer to this question.

There is a lot more work to do in order to recruit more students into vocational programs. These programs must meet students' needs. If college is their need, then we must modify the administration of our programs to allow the college bound student a chance to participate. If we aren't meeting their needs because we offer no programs of interest, we need to change. Market research should be able to answer these questions.

Once we modify our program offerings and the administration and delivery of vocational education, we need to get our message out. It would seem advantageous to educators to target marketing efforts toward the students and their mothers. Mothers were influencers on making a decision to not enroll in vocational education. Mothers' groups need to be approached to inform them of the benefits of vocational education.

We have also identified the student who is more negative toward vocational education. We need to channel our marketing efforts toward the white male from a high socioeconomic status, who is in a college preparatory curriculum. This audience is currently less likely to enroll in vocational education.

Many challenges have been offered in the recommendation section of this research report. The problems have been identified and solutions have been suggested. It is going to take an enormous amount of energy and study before the recommended changes can be implemented. The policy changes will be

controversial and meet with some resistance. It is believed that these changes are needed in order to better serve and better educate the youth of Ohio.

As with many pieces of research, this study probably unveils more questions than it has answered. The intent was purposeful. By posing questions in advance and finding answers to those questions, better decisions can be made.

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APPENDIX A

CURRICULUM CHOICE CLASSIFICATION GUIDELINES

Curriculum Choice Classifications Guidelines

Vocational Curriculum

A student enrolled in this curriculum has spent a considerable proportion of time in vocational course work as compared with the basic skill development that is presumed to be the major function of academic and general education. Vocational students take a substantial number of courses in vocational education and develop a concentration in one area. The average vocational concentrator will have spent about 10 percent of his or her school time in vocational courses. Students who concentrate in a vocational specialty average 6.3 Carnegie Units of vocational course work upon graduation from high school. A concentrator is defined as a person who does not necessarily use all electable credits in the vocational specialty, but uses a substantial majority of them.

The vocational student, as a junior in high school, will have been enrolled in at least 2 continuous years in a vocational specialty program area. It is realistic that the vocational student, as a junior, will have accumulated 2 - 2.5 Carnegie Units of vocational course work. Vocational specialty program areas include: vocational agricultural education, home economics education, business education, marketing education, trade and industrial education, and health and safety services education.

Academic (College Preparatory) Curriculum

A student enrolled in this curriculum is taking coursework to prepare for entry into a 4 year college or university. In October of their junior year they usually take the PSAT, while in the Spring they will take the ACT or SAT. These tests are required for admission into major colleges and universities. Courses selected by students enrolled in an academic curriculum include: chemistry, physics, algebra, geometry, biology, advanced math, advanced science and/or foreign languages. Academic track students average 2.7 vocational credits upon graduation from high school.

General Curriculum

A student enrolled in this curriculum is taking coursework of a general nature in order to earn enough credits for graduation. Courses selected by students enrolled in a general curriculum include: consumer math, general math, general science, life science, earth science, industrial arts, general accounting and/or typing. General track students average 4.6 vocational credits upon graduation from high school.

APPENDIX B

SCHOOL DEMOGRAPHIC DATA

School Demographic Data

Name of School _____

Name of Respondent _____

Position _____

1. What is the approximate population of the high school? _____

2. What is the approximate population of the junior class? _____

3. How many teachers are in the high school? _____

4. How many guidance counselors are in the high school? _____

5. How many juniors are attending the vocational school (JVS)? _____

6. How many miles away is the vocational school (JVS)? _____

7. What is the time required to drive to the vocational school (JVS)?

_____

8. What high school grade levels are offered in this building?

Check all that apply.

Freshman - 9th . . . . . _____

Sophomore - 10th . . . . . _____

Junior - 11th . . . . . _____

Senior - 12th . . . . . _____

APPENDIX C

PARENT INTERVIEW QUESTIONS

PARENT INTERVIEW QUESTIONS

1. You are the parent of a student in high school. Your child has elected not to enter into a vocational curriculum, but has chosen either college preparatory or general education. What are your feelings about vocational education?

2. In your opinion, what is the profile of the average vocational student? What is he/she like? Describe the typical vocational student. What are they like?

3. Does this (Oak Hill) school offer vocational education as a curriculum choice?

4. Do you feel that it is cost prohibitive to send your child to a vocational program?

5. Has your child decided what he/she wants to be when he/she grows up?

6. To what extent do you feel that you or your spouse influenced your child to select a high school curriculum?

7. Who or what influences high school students to select their curriculum?

8. Are you aware of any activities sponsored by the school to look at what vocational education is all about? What are they?

9. Have you personally ever visited a school offering a vocational program?

10. Why do you feel that your child has decided not to enter into a high school vocational curriculum?

APPENDIX D

STUDENT QUESTIONNAIRE

Student and Parent/Guardian Information

A small sample of parents/guardians will be interviewed as a part of this study. The following information is needed. A random selection process will determine who is chosen for the interviews.

Please print neatly!

****

Student Name _____

School Name _____

Parent/Guardian Names _____
(mother/female guardian first and last name)

_____
(father/male guardian first and last name)

Home Phone Number (_____) _____
(area code)

Address _____
(street)

_____
(city) (state) (zip code)

The 3 best times to contact my parents/guardians at home are:

	1st Choice	2nd Choice	3rd Choice
Day of the week			
Time of the day (indicate a.m. or p.m.)			

Student Questionnaire

Purpose

By carefully filling out this questionnaire you will provide valuable information which will assist high school counselors in helping future students to make their curriculum choice.

Directions

Answer each question as accurately as you can. Many questions can be answered by putting a ✓ in the boxes or by circling the item that best describes your situation. Some questions will require a written response. If you do not understand a question, raise your hand and your teacher will help you. All answers are completely confidential.

****

1. Student Name _____

2. What is the name of your school? _____

3. What is your sex?

   Female . . . . . ☐

   Male . . . . . ☐

4. What is your race?

   White (Caucasian) . . . . . ☐

   Black . . . . . ☐

   Hispanic . . . . . ☐

   Asian . . . . . ☐

   Native American . . . . . ☐

   Other (Specify) _____ . . . . ☐

5. Do you live with your father/male guardian?

☐ Yes ☐ No > Skip to Question 8

6. Which of the categories below most nearly describes your father's/male guardian's main job? If your father/male guardian has more than one job, check his main occupation.

(Check only one box)

CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent . . . . . ☐

CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter . . . ☐

FARMER, FARM MANAGER . . . . . ☐

HOMEMAKER ONLY . . . . . ☐

LABORER such as construction worker, car washer, sanitary worker, farm laborer . . . . . ☐

MANAGER, ADMINISTRATOR such as sales, restaurant, or office manager, school admin., buyer, govt. official . ☐

MILITARY such as career officer, enlisted man . . . . . ☐

OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver . . . ☐

PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including school teacher . . . . . ☐

PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college teacher . . . . . ☐

PROPRIETOR O OWNER such as owner of a small business, contractor, restaurant owner . . . . . ☐

PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter . . . . . ☐

SALES such as salesperson, advertising or insurance agent, real estate broker . . . . . ☐

SCHOOL TEACHER such as elementary or secondary . . . . . ☐

SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter . . . . . ☐

TECHNICAL such as draftsman, medical or dental technician, computer programmer . . . . . ☐

Never Worked . . . . . ☐

Don't know . . . . . ☐

7. What was the highest level of education your father/male guardian completed?

(Check only one box)

- Less than high school graduation . . . . . ☐
- High school graduation only . . . . . ☐
- Vocational, trade, or business school after high school
  - Less than two years . . . . . ☐
  - Two years or more . . . . . ☐
- College program
  - Less than two years of college . . . . . ☐
  - Two or more years of college (including two-year degree) . . . . . ☐
  - Finished college (4 or 5 year degree) . . ☐
  - Master's degree or equivalent . . . . . ☐
  - Ph.D., M.D., or other advanced professional degree . . . . . ☐
- Don't know . . . . . ☐

8. American families are divided below into three groups according to how much money they make in a year. Check the square which comes closest to the amount of money your family makes in a year.

(Check only one box)

- $19,999 or less . . . . . ☐
- $20,000 to $34,999 . . . . . ☐
- $35,000 or more . . . . . ☐
- Don't know . . . . . ☐

9. Do you live with your mother/female guardian?

☐ Yes ☐ No > Skip to Question 12

10. Which of the categories below most nearly describes your mother's/female guardian's main job? If your mother/female guardian has more than one job, check her main occupation.

(Check only one box)

CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent . . . . . ☐

CRAFTSPERSON such as baker, painter, plumber, machinist, automobile mechanic, telephone installer, carpenter . ☐

FARMER, FARM MANAGER . . . . . ☐

HOMEMAKER OR HOUSEWIFE ONLY . . . . . ☐

LABORER such as construction worker, car washer, sanitary worker, farm laborer . . . . . ☐

MANAGER, ADMINISTRATOR such as sales, restaurant, or office manager, school admin., buyer, govt. official . ☐

MILITARY such as career officer, enlisted woman . . . . ☐

OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver . . . ☐

PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including school teacher . . . . . ☐

PROFESSIONAL such as clergy, dentist, physician, lawyer, scientist, college teacher . . . . . ☐

PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner . . . . . ☐

PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter . . . . . ☐

SALES such as salesperson, advertising or insurance agent, real estate broker . . . . . ☐

SCHOOL TEACHER such as elementary or secondary . . . . . ☐

SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter . . . . . ☐

TECHNICAL such as draftsperson, medical or dental technician, computer programmer . . . . . ☐

Never Worked . . . . . ☐

Don't know . . . . . ☐

11. What was the highest level of education your mother/female guardian completed?

(Check only one box)

- Less than high school graduation . . . . . ☐
- High school graduation only . . . . . ☐
- Vocational, trade, or business school after high school
  - Less than two years . . . . . ☐
  - Two years or more . . . . . ☐
- College program
  - Less than two years of college . . . . . ☐
  - Two or more years of college (including two-year degree) . . . . . ☐
  - Finished college (4 or 5 year degree) . . ☐
  - Master's degree or equivalent . . . . . ☐
  - Ph.D., M.D., or other advanced professional degree . . . . . ☐
- Don't know . . . . . ☐

12. What grade of school are you enrolled in?

(Check only one box)

- 9th grade - freshman . . . . . ☐
- 10th grade - sophomore . . . . . ☐
- 11th grade - junior . . . . . ☐
- 12th grade - senior . . . . . ☐

13. Which of the following do you have in your home?

(Check one box for each line)

		Have	Do not have
a.	A specific place for study	☐	☐
b.	A daily newspaper	☐	☐
c.	Encyclopedia or other reference books	☐	☐
d.	Typewriter	☐	☐
e.	Electric dishwasher	☐	☐
f.	Two or more cars or trucks that run	☐	☐
g.	More than 50 books	☐	☐
h.	A room of your own	☐	☐
i.	Pocket calculator	☐	☐
j.	Color TV	☐	☐
k.	Microcomputer or minicomputer	☐	☐
l.	Video tape recorder (VCR)	☐	☐
m.	Compact disc player	☐	☐

14. What are your reasons for not choosing to enroll in a vocational education class? (**List most important reasons first**)

15. We would like you to think back to the time when you decided what classes to take in high school. These questions are about some of the things that may have influenced you. Please indicate to what extent you agree or disagree as to why you did not enroll in a vocational education class. That is, why did you not enroll in a vocational program at your school.
The categories are:

SA - strongly agree
A - agree
? - undecided
D - disagree
SD - strongly disagree
NA - this question does not apply to me

(Circle **ONE** response per statement)

example. Vocational education is too easy . . . . . SA (A) ? D SD NA

Reasons **not to enroll in vocational education.**	**Extent of Agreement**
a. My image of the quality of vocational education	SA A ? D SD NA
b. My image of the quality of vocational teachers	SA A ? D SD NA
c. I did not want to become a member of the vocational youth organizations (ie. FFA, FHA/HERO, OEA, VICA, DECA)	SA A ? D SD NA
d. Scheduling problems prevented me from enrolling in vocational education . . .	SA A ? D SD NA
e. Graduation requirements prevented me from enrolling in vocational education . . .	SA A ? D SD NA
f. Vocational education would limit my career choice	SA A ? D SD NA
g. Vocational students are problem students . .	SA A ? D SD NA
h. The low ability level of vocational students	SA A ? D SD NA
i. Associating with vocational students	SA A ? D SD NA
j. Comments I have heard from teachers about vocational students	SA A ? D SD NA
k. Comments I have heard from other students about vocational students	SA A ? D SD NA
l. The cost of vocational education	SA A ? D SD NA
m. I just never thought about enrolling in any vocational courses	SA A ? D SD NA
n. Vocational courses were never presented to me as course options	SA A ? D SD NA
o. I plan to go to college	SA A ? D SD NA
p. Vocational courses are too difficult	SA A ? D SD NA

16. Please indicate by checking **yes** or **no** if you discussed with the following people your decision to not enroll in vocational education courses. If yes is checked, then indicate to what extent, if any, you were influenced to not enroll in vocational courses. The categories are:

SI - strongly influenced
MI - mildly influenced
NI - did not influence
? - undecided

(Check only ONE **BOX**) (Circle ONE **RESPONSE** per statement if YES is checked)

example. My next door neighbor — If yes, to what extent

☐ No ☑ Yes . . . . . SI (MI) NI ?

People I discussed with my decision to not enroll in vocational education.

a. My girl/boy friend — If yes, to what extent

☐ No ☐ Yes . . . . . SI MI NI ?

b. My friend(s)

☐ No ☐ Yes . . . . . SI MI NI ?

c. My father/male guardian

☐ No ☐ Yes . . . . . SI MI NI ?

d. My mother/female guardian

☐ No ☐ Yes . . . . . SI MI NI ?

e. My brother(s)/sister(s)

☐ No ☐ Yes . . . . . SI MI NI ?

f. A relative other than my parent(s)/guardian(s) or brother(s)/sister(s)

☐ No ☐ Yes . . . . . SI MI NI ?

g. My counselor(s)

☐ No ☐ Yes . . . . . SI MI NI ?

h. My teacher(s)

☐ No ☐ Yes . . . . . SI MI NI ?

i. My athletic coach(s)

☐ No ☐ Yes . . . . . SI MI NI ?

17. Describe your thoughts when you think about vocational education.

_____

_____

_____

_____

_____

_____

_____

	YES	NO
18. Have you selected your future occupation?	☐	☐

If YES, please specify future occupational goal:

_____

17. Describe your thoughts when you think about vocational education.

_____

_____

_____

_____

_____

_____

_____

	YES	NO
18. Have you selected your future occupation?	☐	☐

If YES, please specify future occupational goal:

_____

	YES	NO
19. Have you ever attended classes at a vocational school on a regular basis (JVS)?	☐	☐
20. Did you tour the joint vocational school (JVS) prior to your junior year of high school?	☐	☐

21. Describe your thoughts when you think about joint vocational schools (JVS).

_____

_____

_____

_____

_____

_____

_____

22. We would like you to think back to the time when you had the opportunity to attend the vocational school (JVS). These questions are about some of the things that may have influenced you. Please indicate to what extent you agree or disagree as to why you did not enroll in a vocational school (JVS).
The categories are:

SA - strongly agree
A - agree
? - undecided
D - disagree
SD - strongly disagree
NA - this question does not apply to me

(Circle **ONE** response per statement)

example. The JVS is too far away . . . . . SA A ? (D) SD A

Reasons **not to enroll in a vocational school.**	**Extent of Agreement**
a. The image of the joint vocational school in my community	SA A ? D SD NA
b. Associating with the students from the vocational school	SA A ? D SD NA
c. It is too difficult to get to the vocational school everyday	SA A ? D SD NA
d. I did not want to enroll in the vocational education program because it would require me to go to the vocational school	SA A ? D SD NA
e. Students at the vocational school are in classes too late in the day to enable me to work part-time after school	SA A ? D SD NA
f. I would not be able to participate in sports in my home school . .	SA A ? D SD NA
g. I would not be able to participate in extracurricular activities (choir, band, drama, cheerleader, student council, etc.) in my home school	SA A ? D SD NA
h. I was too loyal to this school	SA A ? D SD NA
i. I just never thought about attending the vocational school	SA A ? D SD NA
j. This school will better prepare a student for college than will the vocational school	SA A ? D SD NA
k. The vocational school did not offer programs I wanted to take	SA A ? D SD NA

23. Please indicate by checking **yes** or **no** if you discussed with the following people your decision to not attend the vocational school. If yes is checked, then indicate to what extent, if any, you were influenced to not attend a vocational school (JVS). The categories are:

SI - strongly influenced
MI - mildly influenced
NI - did not influence
? - undecided

(Check only ONE **BOX**) (Circle ONE **RESPONSE** per statement if YES is checked)

example. My next door neighbor — If yes, to what extent
☐ No ☑ Yes . . . . . (SI) MI NI ?

People I discussed with my decision to not enroll in a vocational school.

a. My girl/boy friend — If yes, to what extent
☐ No ☐ Yes . . . . . SI MI NI ?

b. My friend(s)
☐ No ☐ Yes . . . . . SI MI NI ?

c. My father/male guardian
☐ No ☐ Yes . . . . . SI MI NI ?

d. My mother/female guardian
☐ No ☐ Yes . . . . . SI MI NI ?

e. My brother(s)/sister(s)
☐ No ☐ Yes . . . . . SI MI NI ?

f. A relative other than my parent(s)/guardian(s) or brother(s)/sister(s)
☐ No ☐ Yes . . . . . SI MI NI ?

g. My counselor(s)
☐ No ☐ Yes . . . . . SI MI NI ?

h. My teacher(s)
☐ No ☐ Yes . . . . . SI MI NI ?

i. My athletic coach(s)
☐ No ☐ Yes . . . . . SI MI NI ?

APPENDIX E

CODING SCALE FOR SES

(Occupation, Education, Income, Possessions)

6. Which of the categories below most nearly describes your father's/male guardian's main job? If your father/male guardian has more than one job, check his main occupation.

	(Check only one box)	CODE
CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	☐	57
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter . . .	☐	27
FARMER, FARM MANAGER	☐	28
HOMEMAKER ONLY	☐	.
LABORER such as construction worker, car washer, sanitary worker, farm laborer	☐	7
MANAGER, ADMINISTRATOP such as sales, restaurant, or office manager, school admin., buyer, govt. official .	☐	68
MILITARY such as career officer, enlisted man	☐	.
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver . . .	☐	19
PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including school teacher	☐	59
PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college teacher	☐	82
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner	☐	50
PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter	☐	38
SALES such as salesperson, advertising or insurance agent, real estate broker	☐	54
SCHOOL TEACHER such as elementary or secondary	☐	71
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter	☐	16
TECHNICAL such as draftsman, medical or dental technician, computer programmer	☐	61
Never Worked	☐	.
Don't know	☐	.

7. What was the highest level of education your father/male guardian completed?

(Check only one box)

		CODE
Less than high school graduation	☐	1
High school graduation only	☐	2
Vocational, trade, or business school after high school		
Less than two years	☐	3
Two years or more	☐	3
College program		
Less than two years of college	☐	3
Two or more years of college (including two-year degree)	☐	3
Finished college (4 or 5 year degree)	☐	4
Master's degree or equivalent	☐	5
Ph.D., M.D., or other advanced professional degree	☐	5
Don't know	☐	.

8. American families are divided below into three groups according to how much money they make in a year. Check the square which comes closest to the amount of money your family makes in a year.

(Check only one box)

		CODE
$19,999 or less	☐	1
$20,000 to $34,999	☐	2
$35,000 or more	☐	3
Don't know	☐	.

10. Which of the categories below most nearly describes your mother's/female guardian's main job? If your mother/female guardian has more than one job, check her main occupation.

	(Check only one box)	CODE
CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	☐	57
CRAFTSPERSON such as baker, painter, plumber, machinist, automobile mechanic, telephone installer, carpenter .	☐	27
FARMER, FARM MANAGER	☐	28
HOMEMAKER OR HOUSEWIFE ONLY	☐	.
LABORER such as construction worker, car washer, sanitary worker, farm laborer	☐	7
MANAGER, ADMINISTRATOR such as sales, restaurant, or office manager, school admin., buyer, govt. official .	☐	68
MILITARY such as career officer, enlisted woman	☐	.
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver . . .	☐	19
PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including school teacher	☐	59
PROFESSIONAL such as clergy, dentist, physician, lawyer, scientist, college teacher	☐	82
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner	☐	50
PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter	☐	38
SALES such as salesperson, advertising or insurance agent, real estate broker	☐	54
SCHOOL TEACHER such as elementary or secondary	☐	71
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter	☐	14
TECHNICAL such as draftsperson, medical or dental technician, computer programmer	☐	61
Never Worked	☐	.
Don't know	☐	.

11. What was the highest level of education your mother/female guardian completed?

(Check only one box)

		CODE
Less than high school graduation	☐	1
High school graduation only	☐	2
Vocational, trade, or business school after high school		
Less than two years	☐	3
Two years or more	☐	3
College program		
Less than two years of college	☐	3
Two or more years of college (including two-year degree)	☐	3
Finished college (4 or 5 year degree) . .	☐	4
Master's degree or equivalent	☐	5
Ph.D., M.D., or other advanced professional degree	☐	5
Don't know	☐	.

13. Which of the following do you have in your home?

(Check one box for each line)

		CODE 2	CODE 1
		Have	Do not have
a.	A specific place for study	☐	☐
b.	A daily newspaper	☐	☐
c.	Encyclopedia or other reference books	☐	☐
d.	Typewriter	☐	☐
e.	Electric dishwasher	☐	☐
f.	Two or more cars or trucks that run	☐	☐
g.	More than 50 books	☐	☐
h.	A room of your own	☐	☐
i.	Pocket calculator	☐	☐
j.	Color TV	☐	☐
k.	Microcomputer or minicomputer	☐	☐
l.	Video tape recorder (VCR)	☐	☐
m.	Compact disc player	☐	☐

APPENDIX F

DIRECTIONS FOR ADMINISTERING THE QUESTIONNAIRE

Directions for Administering the Questionnaire

Purpose

The purpose of this study is to identify reasons why high school students elect not to enroll into vocational curriculums.

Steps

1. Plan to allow about 20 minutes to administer the questionnaire.

2. Distribute the "Student and Parent/Guardian Information" sheets and the "Student Questionnaire".

3. Explain the purpose of the "Student and Parent/Guardian Information" sheets.

4. Read the purpose and directions on the "Student Questionnaire" and ask the students if they have any questions. Be sure to tell them to write their name on the form and to not leave any question blank. Explain the difference between questions "15 and 22" and "16 and 23".

5. Ask the students to raise their hand if they are unclear about the manner in which they are to respond to any questions.

6. Collect the completed "Student and Parent/Guardian Information" sheets "Student Questionnaires".
7. Thank the students for their assistance. They have made a positive contribution to improving education in your school system.

APPENDIX G

ALTERNATIVE ACTIVITY INTELLIGENCE TEST

Name_____ **INTELLIGENCE TEST**

1. How many grooves are on a 33 1/3 rpm record?

2. Do they have a fourth of July in England?

3. How many birth days does the average man have?

4. Why can't a man living in Winston Salem, N.C., be buried in a spot west of the Mississippi River?

5. If you had only one match and entered a room in which there was a candle, a kerosene lamp, an oil heater, and a wood burning stove, which would you light first?

6. Some months have 30 days, some have 31. How many months have 28 days?

7. If a doctor gave you 3 pills and told you to take one every half hour, how long would they last?

8. A man builds a house with 4 sides to it and it is rectangular; each side has a southern exposure. A big bear wanders by. What color is the bear?

9. How far can a dog run into the woods?

10. How many outs in an inning?

11. I have in my hand only 2 U.S. coins which total 55 cents in value. One is not a nickle. Please bear that in mind. What are the two coins?

12. A farmer nad 17 sheep. All but 9 died. How many did he have left?

13. Divide 30 by 1/2 and add 10. What is the answer?

14. Two men were playing checkers. Each played 5 games and each won the s number of games with no draws. How do you figure this?

15 Take two apples from three apples and what do you have?

16. An archaeologist claimed to have found some coins of gold that were dated 46 B.C. Do you think he really did?

17. A woman gives a beggar 50 cents. The woman is the beggar's sister, but the beggar is not the woman's brother. How come?

18. How many animals of each species did Moses take aboard the Ark with him?

19. Is it legal in California for a man to marry his widow's sister?

20. Now that you have finished, what word is mispelled in this test?

Name_____

INTELLIGENCE TEST

1. How many grooves are on a 33 1/3 rpm record? **2.** One on each side.

2. Do they have a fourth of July in England? **Yes.** However, they do not celebrate Independence Day.

3. How many birth days does the average man have? **One.** You are only born once.

4. Why can't a man living in Winston Salem, N.C., be buried in a spot west of the Mississippi River? **He is still alive.**

5. If you had only one match and entered a room in which there was a candle, a kerosene lamp, an oil heater, and a wood burning stove, which would you light first? **The match.**

6. Some months have 30 days, some have 31. How many months have 28 days? **They all have at least 28 days.**

7. If a doctor gave you 3 pills and told you to take one every half hour, how long would they last? **One hour.** Example, take 1 at noon, 1 at 12:30, and 1 at 1:00 = one hour.

8. A man builds a house with 4 sides to it and it is rectangular; each side has a southern exposure. A big bear wanders by. What color is the bear? **White.** You are at the North Pole. The bear is a polar bear.

9. How far can a dog run into the woods? **Halfway, then it is running "out of" the woods.**

10. How many outs in an inning? **Six.** 3 in the top and 3 in the bottom of each inning.

11. I have in my hand only 2 U.S. coins which total 55 cents in value. One is not a nickle. Please bear that in mind. What are the two coins? **The other coin is a nickle,** so the two coins are a nickle and a fifty cent piece.

12. A farmer had 17 sheep. All but 9 died. How many did he have left? **9.** All but 9 died.

13. Divide 30 by 1/2 and add 10. What is the answer? **70.** 30/.5 = 60 add 10 = 70.

14. Two men were playing checkers. Each played 5 games and each won the same number of games with no draws. How do you figure this? **They did not play each other.**

15 Take two apples from three apples and what do you have? **2.** You took "2" apples.

16. An archaeologist claimed to have found some coins of gold that were dated 46 B.C. Do you think he really did? **No.** People living before the birth of Christ had no way of knowing it was 48 years B. C.

17. A woman gives a beggar 50 cents. The woman is the beggar's sister, but the beggar is not the woman's brother. How come? **The beggar is a woman and the woman's sister.**

18. How many animals of each species did Moses take aboard the Ark with him? **0.** "Noah" built the Ark, not Moses.

19. Is it legal in California for a man to marry his widow's sister? **No.** The man is dead.

20. Now that you have finished, what word is mispelled in this test? **Misspelled.** Nickle is correct as nickel or nickle.

APPENDIX H

INTRODUCTORY LETTER TO SCHOOL ADMINISTRATORS

STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS

FRANKLIN B. WALTER
SUPERINTENDENT OF
PUBLIC INSTRUCTION

DARRELL L. PARKS, DIRECTOR
VOCATIONAL AND CAREER EDUCATION
907 OHIO DEPARTMENTS BUILDING
65 South Front Street
Columbus, Ohio 43266-0308

December 1, 1987

Doug Male
Principal
Miami Trace High School
Box 624
Washington C.H., OH 43160

Dear Doug:

Your school has been selected to participate in a research project to study why students do not enroll into a high school vocational curriculum. We need your help in order to survey students.

Research has shown that many students graduate from high school and college and are unable to procure employment. The data show high employment rates for graduates of vocational education. This project may help your guidance department to do a better job advising students. It is our goal to counsel students to be better prepared to enter society when leaving high school.

This project is supported by the State Department of Education, Division of Vocational and Career Education. We will need to survey a small sample of students in an 11th grade, non-vocational curriculum. The survey questionnaire will be administered within a typical class. It should take about a half hour to complete. An interview will also be conducted with a sample of students and parents. The actual collection of information will occur between December 1987 and April 1988.

You may appoint a building administrator to serve as the coordinator for this project. Their role will be to assist in scheduling dates and times for the survey and interviews. Efforts will be made to not disrupt the normal operation of the school. We encourage you to allow us to conduct this study at your school.

If you wish to speak with the principal investigator about your commitment, please call Rosemarie Rossetti at The Ohio State University (614) 292-6671. Please indicate on the enclosed postcard your response to our request by December 10, 1987.

Sincerely,

Darrell L. Parks
Director
Vocational and Career Education

Rosemarie Rossetti
Adjunct Assistant Professor
The Ohio State University

DLP:RR:rr

Enclosure