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DISSERTATION

Presented in Partial Fulfillment of the Requirement for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Richard Wentworth Beck, B.Sc., M.A.

* * * * *

The Ohio State University
1971

Approved by

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Adviser
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Beck, Richard W., Profiles of Success, (Columbus Public Schools, Columbus, Ohio, 1970)

FIELDS OF STUDY

Major Field

Guidance and Counseling  Dr. Anthony C. Riccio

Minor Field

Adult Education  Dr. John Ohliger
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CHAPTER I

INTRODUCTION

Throughout the nation, the great developments in the field of automation; the changes in consumer spending resulting in increases in service-industry employment while manufacturing-industry employment has remained relatively static; and other changes in our dynamic economy have caused the unemployment of many people whose skills are inadequate to satisfy employer needs. The State of Ohio, as well as the nation, is confronted with the paradox of substantial numbers of unemployed, on the one side, and substantial numbers of job openings that cannot be filled, on the other.

The educational system in Ohio now produces the following: 1

Untrained Students

a. 45 per cent have a high school diploma without job training

b. 25 per cent drop out of the system with no training

Trained Students

a. 15 per cent have a college degree - job related

b. 10 per cent have a technical or academic associate degree - job related

---

c. 5 per cent have a vocational diploma - job related

It has been projected that by the year 1980, Ohio job needs will be as follows:²

a. 45 per cent of employees will need specific employment training - a vocational diploma,

b. 25 per cent of employees will need a technical or academic associate degree,

c. 20 per cent of employees will need a college degree, and

d. 10 per cent of employees will need a high school diploma or equivalent.

These figures show the present educational programs are not reflecting the future employment needs of the students.

The world of work is changing in this country. More and more of today's jobs require better and better educational preparation of the worker.

If the figures reported in the Task Force Report are accurate, then it must become a concern of educators to uncover why high school students are not seeking to enroll in vocational educational programs, if by 1980 forty-five per cent of the students must have the training the programs can offer.

In April, 1969, while speaking before a symposium concerning vocational education, Dr. Anthony Riccio indicated that in order to

²Ibid., p. 7.
encourage students to enroll in vocational education programs, we must have research data available in terms of how students are selected for these programs. Positive criteria are readily available for those who wish to go to college; but for those not "making the grade" we generally suggest some vocational program. What we really need, according to Riccio, are some positive criteria to use in selecting students for our vocational programs.

Even if we have to set the norms lower, at least it is a face-saving device; it does become a means whereby students can be proud of the fact that they were not dumped into programs, but rather that they scored high enough, on measured instruments, to qualify for the kinds of programs in which they have been placed.  

Job-oriented education must not become a dumping ground for the problem cases, the backward students or the unskilled. Vocational education must become an honored partner in the educational enterprise.

Selection criteria in the past, have generally centered around obtaining, not selecting, enough students to fill the class. Most school districts in Ohio have developed criteria to follow in selection procedures; however, in the final analysis the important item was to fill the class.

On January 20, 1970, all Ohio School Superintendents received in the mail, the revised standards for vocational education plans and programs that were adopted by the State Board of Education. Under the

new plan, each school district must provide for vocational education for eligible students based upon the following percentages by September 1, 1974:

<table>
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<th>Percentage of Students For Whom Vocational Education will be Planned by September 1, 1974</th>
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<td>50% or less</td>
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<td>50-60%</td>
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<td>70% or more</td>
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Based on the new standards many school districts will be forced to combine their efforts to meet the standards. The standards indicate that districts may provide vocational education in comprehensive high schools, in vocational schools, in joint vocational schools or by contracting with another district for services.

The term Vocational Education encompasses many individual programs. The seven sub-divisions of Vocational Education are: Agricultural, Distributive, Health Occupations, Home Economics, Office Occupations, Technical, and Trade and Industrial.

The greatest diversity of occupations for which training is given in vocational education is given under the heading of Trades and Industrial Education. Over seventy instructional programs in Trade and Industrial Education were offered in Ohio secondary schools during the school year 1968-69. Some of the more popular courses listed under

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5"Enrollment Summary by Trades," State Department of Education, Division of Vocational Education, 1969, Columbus, Ohio.
Trade and Industrial Education are Automotive Mechanics, Auto Body, Drafting, Electronics, Machine Shop, and Welding.

Due to the large number of programs offered under the umbrella of vocational education, this study will deal with only the Trade and Industrial Education Programs. Each sub-division in vocational education should be studied as to selection criteria, but this type of undertaking would be monumental and far beyond the scope of this dissertation.

**Statement of the Problem**

The design of this study is developmental and non-experimental in nature. The preliminary task is to ascertain through a review of pertinent literature and research and through a review of actual selection procedures now being used in the school districts in the State of Ohio, the basic elements and theoretical framework which should comprise selection criteria for students wishing to enter a vocational program.

The selection criteria which will be developed from the first task area will be submitted to a panel of professional vocational educators for their qualitative evaluation. These vocational educators will be selected on the basis of their interest and professional competency in the area of Trade and Industrial Education. The qualitative evaluation of these professional vocational educators will serve to identify the strengths and weaknesses of the proposed selection criteria. Conclusions and recommendations will be drawn from this qualitative evaluation of the proposed selection criteria.
Purposes of the Study

The purpose of the study are:

1. To develop through a review of pertinent literature and research, and through a review of actual selection criteria now being used in the school districts in the State of Ohio, propose selection criteria for students seeking to enroll in Trade and Industrial Education Programs.

2. To submit the proposed selection criteria to a panel of professional vocational educators, with unique competencies, to gain their qualitative evaluation of the criteria as initially developed.

3. To provide model selection criteria which could be utilized throughout the State of Ohio, in all secondary schools offering Trade and Industrial Education Programs.

4. To provide the school counselor with another instrument by which he can better help students to plan their future.

Definitions

To facilitate the reading of this dissertation, the following definitions of terms are given for clarity.

Vocational Education - A review of the literature of vocational education indicates that variations have existed in the exact definition of the term. The definition used in this study was developed by the American Vocational Association.
Education designed to develop skills, abilities, understandings, attitudes, work habits, and appreciations, encompassing knowledge and information needed by workers to enter and make progress in employment on a useful and productive basis.\(^6\)

**Trade and Industrial Education Program** - This program, which was originally termed the Trade and Industrial Education program, is now also known as the Vocational Industrial Education Program. The program is defined as instruction which is planned for the purpose of developing basic manipulative skills, safety judgments, technical knowledge, and related occupational information for the purpose of fitting young persons for initial employment in industrial occupations. These programs are offered in grades eleven and twelve.

**Professional Vocational Educators** - A group of professional vocational educators who have certain unique competencies that enable them to judge the worth of the proposed selection criteria. These competencies center in the area of Trade and Industrial Education. These experts represent all areas: teaching, supervisors, teacher educators, university professors, and the State Department of Education.

**Selection Criteria** - Selection criteria have been developed for students wishing to go to college. By viewing the scores on the American College Test or the School Ability Test a student can readily see his chances of achieving in college. This type of indicator is

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needed for high school students enrolling in a Trade and Industrial Education Program. In this study the selection criteria will refer to those basic elements that will indicate to the student his chances of achieving in a Trade and Industrial Education Program.

**Qualitative Evaluation** – Professional judgments and evaluations performed by experts. This evaluation is based on the expert's knowledge, understanding and professional biases developed through their exposure to and study of the Trade and Industrial Educational Programs.

**Joint Vocational School** – The Joint Vocational School district is an overlay district encompassing the area of two or more local and/or city districts. A separate school board is elected representing the participating districts; bond issues and levies are passed to provide buildings and operating funds; and vocational students are accepted from participating districts on some pre-determined allocation bases. Students attend the joint vocational school normally for their junior and senior years. General courses are completed in their first two years in their home school while vocational and related subjects are taken at the joint vocational school.

**Assumptions of the Study**

The basic assumptions held are:

1. Since the world of work is in a constant state of change, there is a continuing need to improve the efficacy of appraisal instruments, educational-occupational information, and counseling procedures appropriate for all students.

2. Due to the increased importance of vocational education in
our society there is a need for positive selection criteria for students seeking admission to vocational programs.

3. The high interest and competencies which professional Trade and Industrial educators have in some aspects of selection criteria can contribute, through an evaluation of the selection criteria, to its ultimate improvement and give the proposed selection criteria a certain degree of professional validity.

4. An adequate sample of professional Trade and Industrial educators is available for evaluation of the model.

5. All secondary school districts have some standards for selecting students for Trade and Industrial Education programs. These standards can be organized into model selection criteria.

**Design for the Study**

The method of research employed in this study was non-experimental and developmental in nature. The procedures used in the establishment of the initial set of selection criteria were a synthesis of the pertinent literature and research plus the review of actual procedures used in the secondary school districts throughout the State of Ohio.

It was necessary to collect selection criteria that were already in use in the school districts throughout the State of Ohio. The survey was by means of a questionnaire mailed to sixty-six school districts in Ohio that offer Trade and Industrial Education Programs. The survey was mailed to the supervisor of the Trade and Industrial Education Programs. This list of supervisors was obtained from the
1970 Annual Supervisors Workshop held in August.

Each supervisor was asked to provide the following pertinent information concerning his school district:

1. Name of school district
2. Address of school district
3. Person filling out survey; title
4. Number of T and I Programs offered
5. Number of T and I students
6. How are students selected for your Trade and Industrial Education Programs?

The purpose of this comprehensive review was to develop proposed selection criteria for students seeking to enroll in Trades and Industrial Education Programs.

From the research of literature and from the actual selection procedures being used, this writer attempted to formulate proposed selection criteria. The selection criteria were a compilation of the elements which were judged as most vital by this writer.

The proposed selection criteria were submitted to a panel of professional vocational educators for their qualitative evaluation. The panel consisted of representatives from six areas:

1. State Department, Division of Trade and Industrial Education
2. State Department, Division of Guidance and Testing
3. Teacher Education, Trade and Industrial Education
4. Administrators, Supervisors, and Teachers, Public Schools Trade and Industrial Education
5. School Counselors
6. Ohio State Employment Service

The panel of professional vocational educators made their judgments as to the worth of the proposed selection criteria on the basis of five broad questions.

1. What do you (the evaluator) view as the strengths of these proposed selection criteria?
2. What do you view as the weaknesses of these proposed selection criteria?
3. Has any potential selection area been missed?
4. Are the criteria clear and operational?
5. Do you feel that the selection criteria are valid for predicting student success in the programs?

The evaluators were urged to make any other statements or reactions not indicated by the five general questions listed above.

The results of the qualitative evaluation were summarized by this writer. Conclusions and recommendations were drawn from the combination of the proposed selection criteria and the evaluators' judgments.

Limitations

There are three major factors that have set limitations on this study. The first was in the review of literature and research. Since the passage of the Smith-Hughes Act of 1917, it has been common practice to place students in vocational programs just to fill the class. In essence, the school selected the students; the students did not select the program. Because the problem of insufficient classroom space is
relatively new in vocational education, the amount of literature and research concerning selection criteria is limited.

The second limiting factor is the panel of experts selected to evaluate the proposed selection criteria. No one evaluator on the panel was an expert in selection criteria, however, each member had unique qualifications in vocational education and specifically in Trade and Industrial Education Programs. The various positions they hold and the cross-section of teachers and administrators also assigned a more complete and comprehensive qualitative evaluation.

The third limitation was in the qualitative evaluation. The only feasible method to judge the worth of the proposed selection criteria was to use a qualitative evaluation. The rationale underlying this type evaluation is that the selection criteria as synthesized by the researcher could be improved and could gain a certain degree of validity by receiving substantial agreement from a panel of experts.

Significance of the Study

Guidance counselors have been accused of being academically-oriented and interested mainly in the success and future of potential college-bound students. It has been stated that guidance counselors, as a whole, lack sufficient knowledge of occupations and the trades, while they seem enriched with knowledge of the details and specifics of college entrance requirements.

The role of the guidance counselor in evaluating and directing vocationally-oriented students is vital. The successful adjustment of
a student to high school and to employment depends in varying degrees upon the counseling he has received in school.

The completion of this study may result in providing the counselors with an instrument by which he can better help students to plan their future.

Organization of the Study

The problem of the study has been stated; the nature, purpose and significance of the study have been noted; and the limitations have been posed.

In the remainder of this dissertation, Chapter II will be a review of the literature and research in Trade and Industrial Education and a review of the actual selection procedures now being used in the school districts in the State of Ohio. Chapter III will develop the proposed selection criteria from the information gathered in Chapter II. Chapter IV will relate the methodology of evaluation procedures and the results of the evaluations. Chapter V will state the conclusions and recommendations of this writer.
CHAPTER II

REVIEW OF RELATED LITERATURE, RESEARCH AND CURRENT SELECTION CRITERIA

Introduction

To carry out the design of this study it was necessary to divide this chapter into two distinct parts. Part one contains a review of pertinent literature and research which was conducted to identify those factors which should comprise selection criteria for students wishing to enroll in a vocational education program.

The second part of this chapter is a descriptive survey of selection criteria in use in school districts throughout the State of Ohio in 1970.

This combination of research and actual practices was undertaken to establish guidelines for selection criteria. These guidelines will furnish the needed data to use in designing the selection criteria for completion of this study.

Review of Related Literature and Research

Federal and state guidelines that pertain to selection criteria for student enrollment in vocation education programs are very broad leaving a great deal of latitude to the individual school districts desires on which criteria to use.
"G. Admission of Students. (1) Individuals will be admitted for enrollment in classes and provided instruction for each type of occupation or occupational field on the basis of their potential for achieving competence in the occupation or occupational field through such instruction."

The above paragraph indicates "potential for achieving competence" as the criteria for admission, yet no where is this criterion defined.

Another federal guideline, which was written in 1929, but still is in effect today states the following:

A. Pupils 16 years of age or over. This limitation as to age of admission is written into the national act and must, therefore, be regarded as fundamental.

B. For normal, average students. Unit trade schools cannot be reimbursed from federal funds, when they are utilized for taking care of backward, deficient, subnormal, or incorrigible individuals.  

The federal guidelines, then, only indicate three basic selection criteria to be used in admitting students to vocational education program: age, average intelligence, and the potential for achieving in the program.

Many states have taken the initiative in providing additional guidelines that a school district may follow in selecting students for

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vocational programs. The State of Ohio, Department of Education in 1955 issued a guide list to use if more students sign up for vocational programs than can be accepted due to insufficient space.

If more students sign up for a vocational course than can be accepted:
- all personal data on each applicant should be studied
- individual counseling conferences should be arranged
- teachers who know the student well should be consulted
- second choice courses should be considered
- the practice of either accepting or rejecting those with the best scholastic record or the highest intelligence test score is NOT recommended
- Solution: locally developed criteria for admitting students to vocational programs is (sic) needed.

Dr. Charles A. Prosser, first national director of vocational education, developed and publicized sixteen theorems as a basis for sound and successful vocational programs. Three of the theorems deal either directly or indirectly with selection criteria. In dealing with selection criteria he stated:

Effective Vocational Education for any profession, calling, trade, occupation, or job can only be given to the selected group of individuals who need it, want it and are able to profit by it.\(^3\)

Keese has interpreted this theorem to his classes to mean:

Vocational education is not for everyone and the statement implies that those admitted should be carefully selected through effective guidance procedures. Persons

\(^3\)State of Ohio, Department of Education, Division of Vocational Education, Course Selection and Career Planning, Columbus, Ohio, January, 1955, pp. 9-10.

should be selected on the basis of their own interests and aptitudes, and on the basis of their being potentially a successful employee following preparation.\(^5\)

In theorem Number Four, Prosser\(^6\) stated that vocational education will be effective in proportion as it enables each individual to capitalize upon his interest, aptitudes, and intrinsic intelligence to the highest possible degree.

This theorem, according to Reese, has implications as to:

Class size, to individual instruction, to instructional methods, to effective guidance and selection of learners, and to promotional plans for the program. Here also, is that each specific vocation may well have its own unique requirements for admittance. For example, the depth and ability in mathematics could vary considerably between various occupations as would the physical and other characteristics of individuals.

Probably the most important theorem that was written by Prosser is Theorem Fourteen. In this theorem he said:

Vocational education will be socially efficient in proportion as in its methods of instruction and its personal relations with learners it takes into consideration the particular characteristics of any particular group which it serves.\(^8\)

Again, Reese has presented a short interpretation to supplement this theorem.


\(^6\)Ibid., Prosser, p. 220.

\(^7\)Ibid., Reese, p. 3.

\(^8\)Prosser, op. cit., p. 9.
This theorem implies that there is no single set of general characteristics such as school grades, IQ's or other such characteristics that should be used as a basis for projecting vocational success; but, rather by knowing the individual student's interests, aptitudes, and abilities, he can usually be guided into successful vocational experiences or guided away from enrolling in occupations for which they are unsuited.

Fowler,\(^9\) in a 1945 bulletin, pointed out that the traditional meaning of "selection" emphasizes the role of the school in deciding to reject or accept an individual for training. Qualification standards were set by conditions convenient to the school; little consideration was given to the individual needs of the trainee. The rejected applicants were of secondary concern. However, Fowler's study was approached from the viewpoint that the prospective trainee, in choosing an occupational goal, and consequently the training which leads to it, is the most important part of the process of selection. This position is supported as follows:

1. The basic guidance procedures offer the best means through which the student can make his choice.

2. The school, through these procedures, can realize all the values of selection in the traditional sense and at the same time enhance the welfare of the prospective trainee.

3. In theory, at least, the vocational program will be more sure of getting trainees suited to the demands of the training than when the traditional selection and rejection procedures are followed.\(^11\)

\(^9\)Reese, *op. cit.*, p. 4.


\(^11\)Ibid., p. 5.
The value of the individual's choice is more apparent today with the increased number of vocational programs available to students. Selection is definitely a two-way proposition.

In an article that was written about a two-year program after high school, Bottoms uncovered the same problem that high school administrators and counselors face in the selection of students.

Several questions will have to be answered, however, before a school can hope to establish an adequate admissions program; questions such as what criteria are most useful in the selection of students for specific areas of occupational training, how to identify the learning weaknesses of entering students, and how the area school and the feeder schools can work together to eliminate these weaknesses.  

Bottoms went on to say that the gathering and classifying of data dealing with educational, social-personal and economic characteristics of students entering various courses will lead to improved selection procedures. He felt it was obvious that an organized admission program would increase the confidence of the entering student and give him a greater feeling of pride in his choice of a vocational curriculum.

In a personal interview with Dr. Bottom in May, 1970, at a vocational workshop in Syracuse, New York, he related to this writer that he believes that each vocational training area, or program, should develop its own selection criteria. He further related that

an interest on the part of the student must be considered as a prime factor in the selection process.\textsuperscript{13}

The Rutgers University study of \textit{Vocationally Talented Pupils} points out that high I.Q. is not the sole, nor even the most important indication of ability to work. The report states the following views about selection of students.

After having surveyed the whole field of vocational education, two contradicting facts stand out.

1. Most vocational schools lay particular stress upon general intelligence, as measured by some standards test, in admitting pupils.

2. Principal after principal will tell you of many individual cases where comparatively low intelligence, again as measured by a standardized test, is counteracted by strong interest in a particular kind of work, persistence, and a positive personality.\textsuperscript{14}

In other words, the principals use standards for admission that their own experience indicates are unreliable. This study confirms the fact that general intelligence continues to be regarded as one of the crucial aspects of occupational exactness; it ignores the consideration of many other special abilities and personality traits.

Thomas has written an article in which he states that many students are selected and referred to Trade and Industrial Programs

\textsuperscript{13} Personal talk with Dr. Gene Bottom, May, 1970, Syracuse, New York.

\textsuperscript{14} Division of Field Studies and Research. \textit{Vocationally Talented Pupils}, New Jersey Rutgers, The State University Cooperative Research Project, No. 1038, 1962, pp. 6-7.
because of feelings or attitudes instead of facts. He feels that admission practices are more likely to reflect sympathy, guilt, or prejudice in the referral office than sound counseling practices.

We see too much evidence of the student who is clear and bright-eyed being referred to one kind of training while the student whose appearance falls below this standard is referred to another.

Selection criteria must be precise and scientific. It must consist of indepth interviews -- both oral and written. Appropriate tests should be administered to the trainee. In almost every instance, good non-verbal tests should be used. They should include aptitude tests, general intelligence tests, dexterity tests, mechanical tests, and psychological tests that measure temperament, personality, etc.

When we ask which of those hundreds of test should be used in counseling, we are usually posing the question of which of these tests will predict the future vocational adjustment of a student.

In an article by Crites, he indicated that vocational adjustment means client's success and satisfaction on the job after he has entered the world of work.

The sad but true conclusion which we must draw is that most of our assessment instruments have little or no predictive validity in forecasting these two major criteria of vocational adjustment.

Our traditional tests can provide a student with the information he needs, if they are used for description rather than prediction.

The importance of good selection procedures cannot be over


emphasized. The Texas Industrial Cooperative Training Manual states that one of the chief factors determining the efficiency of a training program is the quality of students selected to enter training.

Quality students does not necessarily mean those in the Grade A quartile, but refers to those who possess the aptitude and qualifications required for success in a predetermined field of work.  

Phipps, writing in the American Vocational Journal, stated that the majority of students enrolled in vocational agriculture can benefit from the training; a few enroll who probably should not, and a number who are screened out should be in the program. Phipps indicated that this condition calls for an examination of criteria and practices used in selection and admission.

Who then should be enrolled in vocational agriculture? Without spelling out the criteria the simple answer is: Students who can profit from the program. And not necessarily only those who are committed to earning a living from the farm.

In a special edition of the American Vocational Journal marking the 50th anniversary of the Smith-Hughes Act, Ralston summarized some of the basic considerations we must take into account to attain our objectives in Trade and Industrial Education. Item two of his article stated:

\[\text{Vocational Industrial Education Division, Texas Education Agency, Industrial Cooperative Training, Texas, 1960.}\]

\[\text{Curtis Phipps, "Who Should be in Vocational Agriculture?," American Vocational Journal, Vol. 43, No. 9, December, 1968, pp. 54-56.}\]
Effective recruitment and selection systems for enrolling students who can profit from the instructions.19

In the Special School District of St. Louis County, which has the responsibility of providing Vocational Education for twenty-seven high schools, their selection criteria are stated by Stark in a recent American Vocational Journal.

Only students completing grade 10 and in good academic standing in their home school shall be admitted.

The students admitted to each program should be judged these most likely to profit from the instruction.20

The selection and guidance program at Los Angeles Trade-Technical School has been utilizing tailor-made aptitude test batteries especially designed to predict successful training in some fifty-five different trade-technical programs.

The testing and guidance program at Trade-Tech consists of two essential parts; first, the testing is based on the premise, that man possesses many different kinds of intelligence and that these are identifiable and measurable by aptitude tests of relatively "pure" abilities, second, the individual counseling after group testing involves the applicant using the joint services of a trained counselor and an instructor from the trade or technical field for which the applicant has applied for admission.21


In contrast to the homemade aptitude tests that are administered in the above school, enrollees in the vocational courses at Jefferson Area Vocational School in Kentucky are selected chiefly on the basis of the General Aptitude Test Battery scores.

When the potential student's GATB scores casts some doubt on the possibility of his success in a particular course, the vocational counselor re-tests and interviews in depth in an effort to help him make valid vocational decisions.  

McDowell goes on to state in the above article that on numerous occasions the home high school counselors have accompanied students and their parents to the Jefferson Area Vocational School to work out other problems concerning the students' vocational aspirations, goals, and training. These are all important in selection procedure.

To elaborate on the work of the counselor, as viewed by some vocational educators, Burkett had this to relate in his article, "Why Separate Vocational Guidance?"

The vocational educator does not expect the counselor to merely sign up students to fill vocational classrooms. He expects the counselor to help the student understand himself, the world in which he will live, the work he will perform, and his potential abilities to succeed.  

Some school districts have general and specific selection requirements for those students wishing to attend a vocational program.

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Williams has indicated that in addition to specific entrance requirements in certain Trade and Industrial Programs, there are six criteria that must be met by all students who apply for any vocational program in his school district.

To qualify, the student must (1) be 16 years of age or older by January 1, of the eleventh grade; (2) be in the last two years of the school program; (3) have made an occupational choice; (4) have successfully completed two units of mathematics; (5) have necessary aptitude traits as indicated by the General Aptitude Test Battery; and (6) have a successful prevocational rating in the vocational area selected.24

The 1969 minimum requirements, as set by the State of Ohio, for entrance into a vocational program are:

(1) A student must be sixteen (16) years of age prior to January 1 of the year of his entrance into the vocational school.

(2) A student must comply with the minimum requirements for graduation from high school. The student must have completed a sufficient number of credits in the ninth, tenth, or eleventh grades, depending upon a one or two year vocational program, so that the vocational credits added to the credits from the sending school will equal 16 units until 1970 and after 1970 will equal 17 units of credit for graduation.

(3) A student must be selected for work-oriented program on the basis of interest and ability to profit from the instruction and must be eligible for employment upon the completion of the vocational program.25

From the data furnished in the review of related literature and


research, this writer concludes the following:

(1) There is a lack of articles or research available on the subject of selection criteria for students wishing to enter a vocational program, and, more specifically, those wishing to enter a Trade and Industrial Education program; (2) there is a great diversity of selection criteria that researchers indicate are being used; (3) there is contradiction by authorities on what criteria should be used; (4) school systems have developed their own criteria, based on the needs of their system and (5) the only item that is held in agreement by all of the research is that interest on the part of the student is necessary.

A Review of Current Selection Procedures Used in School Districts in Ohio

This part of Chapter Two will deal with a review of the current selection procedures being used in school districts throughout the State of Ohio. The school districts will be reviewed in alphabetical order, followed by a review of the selection procedures being used in the joint vocational school districts, also reviewed in alphabetical order.

Each school district, or joint vocational school district, will be named, followed by the selection procedures that they use. In Appendix A of this dissertation will be found the person reporting the selection procedures, the number of programs offered, and the number of students involved in the programs. The above stated information is deemed necessary in providing the data needed in this study.

In order to collect the needed data for this part of Chapter Two, a questionnaire was mailed to all school districts and joint vocational
school districts throughout Ohio that offered at least three Trade and Industrial Education Programs. Table One contains the tabulation of the number of questionnaires mailed and the number and per cent returned.

**TABLE 1**

**ANALYSIS OF THE NUMBER OF QUESTIONNAIRES RETURNED BY SCHOOL DISTRICTS AND JOINT VOCATIONAL SCHOOL DISTRICTS (JVS)**

<table>
<thead>
<tr>
<th></th>
<th>Number Mailed</th>
<th>Number Returned</th>
<th>Per Cent Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Districts</td>
<td>46</td>
<td>37</td>
<td>80</td>
</tr>
<tr>
<td>J.V.S. Districts</td>
<td>20</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>Totals</td>
<td>66</td>
<td>54</td>
<td>82</td>
</tr>
</tbody>
</table>

**Akron City Schools**

The application and the teacher rating form are returned to the counselor. The counselor channels the teacher rating form to the subject teacher most closely related to the vocational course the student has selected. The teacher returns the completed form to the counselor to be attached to the application.

The counselor, in the meantime, completes the back side of the application with grades, attendance, test scores, counselor rating, and any additional remarks.

A point value is assigned for grades, attendance, test scores, counselor recommendations and teacher recommendations.

This helps the committee in ranking the applications. The
applications are then classified as accepted, not qualified, or hold. The vocational coordinator, the sending school counselor, and the receiving school counselor make up the screening committee.

It is not how many students they can exclude from the vocational program but how many students they can accept and potentially profit from the program.

Alliance City Schools

The selection procedures at Alliance City Schools is not formalized, due to the fact that they offer only two Trade and Industrial Education programs, Drafting and Machine Trades. The students are selected on the following basis: overall grades, attendance, teacher recommendations, counselor recommendation, student interest, grades in drafting or metal shop, aptitude test scores, and by a personal interview with the drafting or machine trades instructor. There is no indication that any students are rejected for admission.

Ashland City Schools

After the student has completed an application, he is interviewed by the counselor, and then rated on the following nine areas: grade average, I.Q., reading ability, attendance, appearance, reference from four teachers, credits toward graduation, need for the course, and discipline record. The student is rated numerically in each area, the scores are averaged and the student given a final rating. The students are then eligible for enrollment, starting with the highest and working down the list until all space is absorbed.

Barberton Public Schools

Selection criteria used at Barberton High School center around six
areas: grades, attitude, attendance, mental level, reading comprehension, aptitude.

Grades: only grades earned in grade nine and the first semester of grade ten are considered. Letter grades are converted to points. (A = 4, B = 3, C = 2, D = 1).

Attitude: the teachers who have the students in class at the time of selection are asked to rate the applicants. All ratings are then average out.

Attendance: attendance records are used from the ninth grade and up to the end of the first semester of grade ten.

Mental level: I.Q. scores are averaged from grade six to grade ten. An average student shall have three tests, however, if he has less than three, the most recent test is used.

Reading comprehension: The most recent reading comprehension score is used.

Aptitude: Students are requested to take the portion of the D.A.T. that pertains to their choice of program.

Bonus points are awarded for those students taking recommended courses.

One basic reason for using this type of selection criteria, as opposed to committee evaluation is to avoid as much as possible the use of personal subjective judgment.

Berea City Schools

A point scale conversion is also used in the Berea City Schools. Student selection criteria are based on mental ability, reading achievement, vocational teachers, rating, counselors evaluation, teacher
references, mathematics achievement, attendance, and grade average in shop course in grades nine and ten.

Students may receive their applications from a counselor or the instructor. The Vocational Instructor must hold a personal interview with each student.

The counselor, the instructor, the Director of Vocational Education and a representative of the high school administrative staff select the students for entry into the program.

Canton City Schools

Students in Canton City Schools may transfer to Timken Vocational High School in the eleventh grade. The only requirements are: recommendation of their counselor, interest in a certain program, and grades. In some cases grades received in a tenth grade vocational exploratory class are used as selection criteria.

Cincinnati Public Schools

There is no formal selection criteria or procedures in the Cincinnati Public Schools. A student may sign up for any Trade and Industrial Program offered. The only limit is set by class size. This system is based on a first come, first serve basis.

Cleveland Public Schools

The Cleveland Public Schools have two vocational high schools, Jane Addams and Max S. Hayes, and 13 other comprehensive high schools that offer trade and industrial education programs. The only admission requirements are: completion of grade nine, good school attitude, good attendance record, and vocational aptitude for the
desired program.

**Columbus Public Schools**

Entrance qualifications vary, depending upon the type of vocational course selected. Most require average or above average ability. Students may make application for admission to vocational courses through their home school counselor. Final selection and placement will be made by the Supervisor of Vocational and Career Services of the Columbus Public Schools. Decisions will be based upon past school record, results of screening tests, abilities and qualities pertinent to success on the job and parental agreement.

**Cuyahoga Falls City Schools**

In order to be selected for a Trade and Industrial Education Program, the student must submit an application to the school counselor and then be interviewed by the T and I instructor. The final selection is made by the teacher and the counselor. No formal criteria are applied.

**Dayton Public Schools**

Students in Dayton who wish to attend a vocational program are recruited during the eighth grade. From each of the sixty elementary schools, eight per cent of the students are selected to attend the vocational school. They are selected, based upon: grades, attendance, attitude and test scores. As freshmen they spend nine weeks, two periods a day, in four vocational areas of their choice. At the end of grade nine the students elect a vocational area or division, are interviewed by the coordinator of the division and based upon their ninth grade performance are accepted or rejected. Some students will be accepted for their second choice.
Elyria City Schools

In the tenth grade at Elyria, the students may enroll in a rotating pre-vocational program. The student is then selected for T and I programs based on his performance, ability and interest, when he reaches the 11th grade.

Findlay City Schools

The number of programs offered in the Findlay City Schools has been so expanded to take care of more students than they are able to recruit. Normally, any students are accepted that would benefit from the training and has the ability to receive the training.

Hamilton City Schools

Two vocational guidance coordinators have recently been added to the staff. They have been given the responsibility of designing a selection procedure. No formal procedure has been used in the past.

Heath City Schools

Students in the Heath City Schools and adjacent school districts may attend the Heath Area Vocational School if they meet the following requirements:

Applicants will have completed all tenth grade work and be classified as juniors. Scores on the Differential Aptitude Test, in numerical ability, mechanical reasoning, and space relations, should be above the 35 percentile. All applicants will be interviewed by the Director of Vocational Education and he has the authority to accept or refuse any student.

Lima City Schools

Students are given two tests that are used as vocational guidance
instruments. As ninth graders they are given the Differential Aptitude Test, and as tenth graders they are given an interest inventory test that was compiled by the vocational counselors. In addition to these two instruments a one semester pre-vocational class is offered to tenth grade students. The purpose of the pre-vocational class is to give the students some "hand-on" experience in each area of Trades and Industry. In addition to the D.A.T., the Interest Inventory, the grades in the pre-vocational class, they also use as selection guides attendance records, grades, and I.Q., and a teacher evaluation.

Mad River Township, Montgomery County

The general requirements to enter a vocational program are: 16 years of age, in the last two years of high school, completed academic requirements, and have taken the General Aptitude Test Battery.

The student must fill out an application, and have his parents sign it. The school counselor must fill out a form concerning the students academic background. Students are selected on the basis of mental maturity, achievement test scores, GATB scores, attendance, and personal interview.

Maple Heights City Schools

Selection is not a major fact in this school system, due to the small number of applicants. The selection method involves a personal interview with the school counselor and the filling out of an application. The director of vocational education then approves the application. Other methods have been tried in the past, but they are now experimenting with this idea.
Mansfield City Schools

The complete responsibility for selecting students in this system is left to the vocational guidance counselors. They set up the criteria that they feel are important. The criteria may vary from counselor to counselor.

Marion City Schools

Personal interviews are the most significant part of the selection procedures in this system. After the student has filled out an application for one of the programs he is interviewed by the school counselor. The counselor then sends the student to the supervisor for an interview, and from there the student is sent to the coordinator for another interview. The student is then referred to the T and I teacher for another personal interview. The final decision is made when the counselor, supervisor, coordinator, and teachers hold a meeting to select the students.

Massillon City Schools

Students make their own selection in Massillon. If, however, there is not room in a particular class for all students who request it, then students are selected on the basis of an evaluation. The evaluating instrument judges the students on the basis of: teacher recommendation, grade point average, I.Q. score, I.T.E.D. score, reading ability and attendance. Each area of evaluation has a point scale and students are selected on the basis of the highest accumulative total.

Mayfield City School District

All students who want, need, and will benefit from vocational education are accepted into the program. All of the below stated methods are
employed in the selection process of T and I students for the programs in Mayfield.

Recommendations of guidance counselors, who have interviewed the student, checked his attendance, his grades, and his achievement test scores, is the first step. The student's teachers are asked for a recommendation. A discussion is held with the parents and finally a decision is reached by the T and I teacher, based on all of the above information.

Middletown City Schools

In this system student enrolls in pre-vocational classes in grade ten. The teacher of the pre-vocational classes makes recommendations to the school counselor for those students who he feels is best suited for vocational training. This is only a recommendation. The school counselor, with the student, in cooperation with the parents, makes the final decision. This decision is based on ability, interest, achievement, and attendance.

Morgan Local School

Students will be selected for training on the basis of their interest and ability to profit from the instruction, prerequisite courses completed, attendance record, aptitude tests scores, personal interviews, and finally recommendations.

Each vocational teacher, appropriate supervisor, and school counselor will meet to review the students recentials, at which time selections will be made.

New Philadelphia City School District

At this time there is no selection procedures printed for students
enrolling in vocational education. The only contact that students have with vocational education is one assembly for all tenth graders in which former students, via a tape recorder and slides discuss why they enrolled in a vocational program. Considering the number of programs offered and number of students seeking admission, there is no need for a selection procedure. They are able to accept all students that apply.

**Northwest Local**

Basic information collected, for use by the selection committee, on each student applying for a vocational program is: attendance, grades, mental maturity, personal traits, and teacher references.

After compiling all of the above information, each student is evaluated by a committee of five counselors and one administrator. The final decision is made by this group, based on information given above. Since last year was the first year of operation for this school the problem of space available was insignificant.

**Parma City Schools**

Applicants are chosen for vocational programs on the basis of scholastic record, completion of pre-requisite courses, attitude towards school, attendance, interest in occupation, and desire to do successful work in the program.

Each student must receive recommendations from three teachers and his school counselor. This information is then assembled and sent to a screening committee for evaluation and selection. The screening committee is comprised of a representative from the vocational counseling staff from each of the three feeder high schools plus the coordinator
of Vocational Education. Student names are arranged in a priority listing with the best qualified to the least qualified. The local board of education determines the number of programs that will be operated and number of students to accept. The top number of students on the priority list are then enrolled in the program.

Plain Local

Junior standing is the only requirement that is used for entrance into a T and I program. The counselor selects the students from those who apply. The problem of more applicants than space is not a problem at this school.

Sandusky City Schools

The selection criteria for students wishing to enroll in vocational programs in Sandusky center around four basic areas. Students receive point values for their overall grade average, average in pre-requisite courses, teacher recommendations, counselors recommendations and test scores on the D.A.T. Classes are filled by listing applicants in order of points and taking from the top of the list until the class limit is reached.

South-Western City Schools

Prior to submitting an application for a vocational program a student is exposed to vocational education through assemblies, class discussion, visitations to training centers, group meetings with vocational instructors and finally a counseling interview. The student then submits an application to his school counselor, who holds a second interview with the student, and then places on the application test
data, attendance, and grades. The applications are then screened by a committee. Applicants are either accepted, rejected, or held in reserve for future placement, if space becomes available.

**Sylvania City Schools**

Students that submit an application for a T and I program are given a personal interview by the vocational guidance coordinator. If this coordinator feels the student is a good prospect for a T and I program, he contacts the student's parents for their permission to let the student attend the program, if he is selected. The applicant is then screened by the T and I teacher. Other teachers may be asked for their recommendation if the counselor feels it is necessary. The guidance coordinator and the T and I teacher makes the final selection.

**Toledo City School District**

Macomber Vocational Technical High School is a four year school. Students in the eighth grade from every school in the district are invited to spend a morning at the high school. This involves an orientation and a tour of facilities. Concerning selection procedures, each boy from a public school is evaluated on an information card that is sent from the elementary school to the high school. Selection is based on mental maturity score, current grades, Iowa Test of Basic Skills, and recommendations from eighth grade teacher and principals.

Whitney Vocational Technical High School is under the same administrative as Macomber, only it is a 3 year school for girls.

**Wadsworth City Schools**

During the freshman year every student is given the General Aptitude
Test Battery. As sophomores, students are given an opportunity to visit the vocational programs and talk, in general, with the instructor. Later in the year students are asked to make two choices of vocational programs. From these choices, individual interviews are set up between the student and the T and I teacher. Information provided, by the counselor, to the T and I teacher helps the teacher decide on what students should be admitted for the training.

Warren City Schools

Each 10th grade student that is interested in a vocational program is required to take the General Aptitude Test Battery. Another selection criterion is the performance of the student in his pre-vocational course in grade ten. Grades, completion of recommended subjects, and the recommendation of the vocational guidance counselor completes the procedure.

Washington Local Schools

The following factors provide a basis for selection of student to vocational programs. In addition to the item listed below, any other information, such as family circumstances, is considered.

Grades, grades in specific related subjects, achievement test results, specific courses taken, recommendation of counselors and teachers, attendance, appearance of students and availability of transportation to the vocational program are all considered when selecting students for vocational programs.

In the final analysis, selection and placement is carried out by the Vocational Director and the Vocational Guidance Coordinator.
West Clermont

In this comprehensive school they are not faced with the problem of selection. They do use the G.A.T.B., individual conferences, attendance, and personal desire. There is sufficient space to accept all students who want to enroll in a program.

Youngstown City Schools

Students interested in pursuing a vocational program will make formal application in grade 10 or 11. This is usually accompanied by the counselors working with the students and by teachers providing relevant career information prior to submitting the application.

After the application has been filled out by the student, and signed by his parents, the counselor completes the application with information on grades, attendance, test scores, and personal comments.

The school counselor and the vocational guidance coordinator set up a meeting to discuss and evaluate each application. When all high schools have been visited and applications processed, the applications are then grouped as to the best qualified to the least qualified.

A Review of Current Selection Procedures Used in J.V.S. Districts in Ohio

Eastland Joint Vocational School

A student who wishes to attend Eastland JVS will have his records reviewed by three groups. At the student's home school the counselor will review the student's test data, attendance, student records, teacher recommendations and then hold a conference with the student. The students that the counselor feels will benefit from the training will then have their applications sent to Eastland Joint Vocational School. Another
screening process is undertaken by a committee composed of the guidance staff, teachers, and the supervisor of the joint vocational school. The accepted applications are then sent to the director for his final acceptance or rejection.

No specific requirements for selection are indicated, however, the following information is included on the application: physical disability, attendance, differential aptitude test scores, achievement tests, and student's grades.

Ehove Joint Vocational School

A council of personnel consisting of both Ehove and Home school guidance counselors, chief administrators, and Ehove administrative staff have established multi-factor criteria to determine the sequential priority of students applying for admission to the specific programs; so that the students admitted to each program be those judged likely to profit from the instruction provided and to succeed in the occupation for which they are preparing.

Ehove will accept all qualified applicants insofar as facilities permit. The pupil personnel and administrative staff at Ehove will determine the final acceptance of students into a program. It is suggested that all students be administered the General Aptitude Test Battery.

Four County Joint Vocational School

The home school counselor reviews test data, student records, and if at all possible, conducts a personal interview with the student and the parents of any one wishing to enroll at Four County Joint Vocational
School. After this has been completed, formal application is made to the joint vocational school. This application must include test data, counselor and/or principal's recommendation and any other supportive data. As the formal applications are received at the joint vocational school, the guidance staff reviews these applications and, if needed, a personal interview is conducted with the student. The guidance staff recommends the students selected to the director of the vocational school. The director makes the final decision as to which students will be admitted.

Hamilton County Joint Vocational School

Factors that are used to screen students for enrollment into a vocational program at Hamilton County Joint Vocational School are: general learning ability, attendance, English achievement, math achievement, reading level, interest of student, teacher and principal recommendations, G.A.T.B. test results, and health factors. The decision as to which students shall be admitted is left up to a committee composed of the local counselor, local principal, J.V.S. counselor, J.V.S. instructor, and the J.V.S. Director of supervisor.

The programs offered at this joint vocational school are open to citizens of the districts who are at least 16 years of age who seek to develop, improve, or update saleable skills.

Knox County Joint Vocational School

Admission to the Knox County Joint Vocational School is open to all residents pupils within the Centerburg, Danville, East Knox, Fredericktown, and Mount Vernon school districts who demonstrate the
ability and interest to attend.

General requirements are: 16 years of age, good physical health, junior class standing, seven units of academic credit which will include English, mathematics, science, social studies and physical education.

If the student meets the above requirements he must submit an application and have two teachers and his principal write letters of recommendation to the counselor. All material is submitted to the Supervisor of Guidance and Placement at the joint vocational school. Final selection is determined by the supervisor of guidance and placement.

Lake County Joint Vocational School

A student wishing to attend Lake County JVS will submit an applicant and have three teachers submit letters of recommendation. The teachers will be asked to rate the student in the areas of behavior, following directions, perseverance, initiative, reliability, speed and accuracy and safety. These forms along with a student chart that is filled out by the home school counselor, is sent to the J.V.S. The supervisor of vocational education makes the final decision based on recommendations, attendance, intelligence test scores, differential aptitude test scores, mathematics grade, and point average.

Lorain County Joint Vocational School

The instrument used in this activity is a weighted selection scale. The scale contains criteria that is equally applicable to all vocational programs. All data calling for particular aptitudes is derived from the
General Aptitude Test Battery. Specific criteria used in the selection of students are: grades, attendance, recommended courses, teacher recommendations, special consideration and specific sub-test scores of the G.A.T.B. All of these factors receive a point value. The student receiving the highest total score is the first selected.

Mahoning County Joint Vocational School

This school will open in 1972. No selection criteria have been established.

Montgomery County Joint Vocational School

Students desiring to be admitted to this joint vocational school will be selected on the basis of written recommendations from two staff members of his home school, a transcript of his grades, scores on the General Aptitude Test Battery, physical condition, proper number of high school credits, and completion of prerequisite courses.

The criteria listed above appear to be necessary to insure that students possess abilities in line with their particular program choice. Also by the use of test results a student can see if he has the necessary aptitudes to indicate a reasonable chance of success in his desired program as well as successful employment upon graduation.

Muskingum Area Joint Vocational School

The only selection criterion that is used in this joint vocational school is that a student must be junior standing in his class. In practical nursing a student must also have a "C" average.

Penta County Joint Vocational School

Any student that wishes to attend this school will be accepted. Interest is the only criterion.
Pike County Joint Vocational School

A student profile is developed by each home school counselor on each student wishing to attend the vocational school. This profile contains a statement as to why the student wishes to attend, the mental maturity data on the student, the student's achievement scores, an interest inventory, his grades, D.A.T. scores, G.A.T.B. scores, three teacher evaluations, school attendance and a statement of his physical ability.

This information is sent to the vocational school where a committee of counselors, teachers, and administrators make the final judgment.

Pioneer Joint Vocational School

Five distinct procedural areas are used in the selection of students for Pioneer J.V.S. The student is judged on the basis of personal data: hobbies, work experience, and why he wants to enroll in the program. The second area is the screening of his records for attendance, physical status, achievement tests scores, mental ability and counselor recommendations. The third area is the G.A.T.B. scores.

In the fourth area the recommendations of two teachers is required. And finally a personal interview is held with the student.

The records and information stated above are received by the vocational school counselor, teachers, and supervisor. This committee makes the final decision.

Tri-County Joint Vocational School

For placement into a vocational program at Tri-County, the following
factors are taken into consideration when evaluating student applications. Consideration is given to G.A.T.B. scores, OVIS scores, attendance, academic achievement (grades), mental maturity, and physical condition.

Vanguard Joint Vocational School District

The following items are used in the selection of students: attendance, achievement, test results, mental maturity, point average, student interest, prerequisites, home school recommendations, family hardship or need, and personal interview with applicant and/or parents.

The stanine system was chosen as the single base for using the about selection criteria. Each placement criteria has a point number value assigned to the stanine level. All point values are added together and then averaged out. The student applications are then placed in numerical order for selection.

Washington County Joint Vocational School

This joint vocational school will open in 1972, however, the basic philosophy they have established is that any student desiring entrance into the JVS and who has a sincere desire for it, and can profit from the training will be placed in the program.

Wayne County Joint Vocational School

A committee composed of the counselor, the supervisor, and the instructor from the JVS screen and either accepts or rejects a student's application. Student application are scored on the basis of the following areas, grades of related subjects, student statement, teacher recommendation and interview.
Summary

From the review of current selection procedures being used in the school districts and joint vocational schools districts in Ohio, this writer concludes the following:

(1) There is no standard selection criteria being used in all school districts or joint vocational school districts in Ohio.

(2) Selection criteria will vary from no criteria at one school to highly selective criteria at another school.

(3) At this point in time, selection is not a major problem in our Ohio schools for vocational education.

(4) School counselors are directly involved in the selection process in the school districts and joint vocational school districts in Ohio.

This rather lengthy review of research, literature, and current selection practices used in school districts and joint vocational school districts of Ohio was undertaken to provide material to be utilized in the development of a selection criteria for students interested in Trade and Industrial Education Programs.

It was necessary to review not only the theoretical, but also the state guidelines and actual procedures being used in the school districts in order to gain the background needed to advance this study.

Chapter III of this study will develop proposed selection criteria based on the information gathered in this review.
CHAPTER III

DEVELOPMENT OF PROPOSED SELECTION CRITERIA

Introduction

This chapter will deal with the interpretation of the data collected in Chapter II of this study and the development of the proposed selection criteria. The procedures used to carry out this plan can be divided into three phases. The first phase was devoted to establishing the guidelines as set forth by federal and state laws; the second phase was to interpret the selection procedures as presented by the school districts and joint vocational school districts; and the third phase was to develop proposed selection criteria based on the interpretation of the findings.

State And Federal Guidelines For Selection Criteria

Any formalized selection criteria must take into consideration the federal and state guidelines. The federal guidelines, as was pointed out in Chapter Two, are very broad in scope and leave the school districts with only minimal guidelines. However, the guidelines specifically indicate that a student must be at least 16 years of age. The second area of concern is intelligence. Although no cut-off score is prescribed, the guidelines state that only normal, average students shall be in the programs. This regulation excludes from
Trade and Industrial Education Programs students who qualify for special education classes. The third area presents the challenge to the school, and more specifically to the counselor, of selecting students that have the potential for achieving in the program.

The minimum requirements, as set by the State of Ohio, expand the entrance requirements of the federal regulations and add some other requirements. The State also indicates the age of 16, but further states that the student must be 16 years of age prior to January 1 of the year of entrance into a vocational program.

The State also requires a student to comply with the minimum requirements for graduation from high school. This means that the student must meet all subject requirements of the school plus having accumulated enough credits to total at least 17 counting his academic and his vocational credits.

The State also indicates that a student must be selected on the basis of his interest and his ability to profit from the program, and must be eligible for employment upon completion of the vocational program.

The following are the minimum guidelines that a student must meet in order to be selected for a Trade and Industrial Education Program.

1. Age - 16 years of age prior to January 1 of the year of his entrance into the vocational program.

2. A student must not be in a special education class, or in a modified class, as defined by State law.

3. A student must comply with the minimum requirements
for graduation from high school.

(4). A student must be selected on the basis of his interest and his ability to profit from the program.

(5). A student must have the potential for achieving in the program; to be eligible for employment upon graduation.

The first three requirements are very specific, and can be found by reviewing the student's permanent records. The last two areas: interest and ability to profit from the program and the potential for achieving in the programs to be eligible for employment, are discussed in the literature, but no consensus was arrived at as how best to measure or predict in these two areas. It is for this reason that a review of actual selection procedures being used by school districts and joint vocational school districts was undertaken in Chapter II.

A Summary Of Selection Procedures Used In School Districts And Joint Vocational School Districts

As this writer reviewed the actual selection procedures being used in the school districts of Ohio that participated in this study, it became apparent that the only meaningful way to study this material was by the use of summary information placed in table form. The information tallied was divided into six areas. The areas were: attendance, grades, tests, interviews, recommendations, and miscellaneous. The table titles indicate the broad area and under the sub-title of activity the specific way the information was listed, followed by the numerical count of the times this specific item was used. It should be noted
here that out of the 37 school districts participating in this study, six school districts did not use any criteria, other than the first three required by law. All percentages were based on the total number of survey schools; thirty-one school districts and fifteen joint vocational school districts.

The use of grades, in school districts and in joint vocational school districts, as a vocational selection criterion, is presented in Tables 2 and 3.

### TABLE 2

THE USE OF GRADES IN SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of School Districts Using this Criterion</th>
<th>Percentage of School District Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Grades</td>
<td>19</td>
<td>61</td>
</tr>
<tr>
<td>Grades in Related Subjects</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Pre-Vocational Class Grades</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Class Rank</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

*Twenty School Districts (65%) use one or more of these grade criteria in the Vocational Selection procedure.*

**Interpretation of Data**

The use of grades as a selection criterion for vocational programs was found to be very popular in school districts and in joint vocational school districts. The idea that past academic grades are a good indicator of success in a vocational program was not substantiated by the literature, yet it appears to be a common practice. The literature also
indicated that schools have a tendency to use data in selection procedures that is convenient for them to collect.

**TABLE 3**

THE USE OF GRADES IN JOINT VOCATIONAL SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Joint Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Grades</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Class Rank</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Only Mathematics Grades</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Grades in Related Subjects</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

*Eight Joint Vocational School Districts (53%) use one or more of these grade criteria in their Vocational Selection procedures.

Tables 4 and 5 summarize the use of testing as a selection criterion in the school districts and joint vocational districts.

**Interpretation of Data**

Intelligence tests, achievement tests, aptitude tests, and interest surveys are all used by school districts and joint vocational school districts in their selection process. The literature revealed that intelligence test scores is not a sound criterion to use in the selection process. The State guidelines indicate a normal, average student as a minimum guideline and this could be the reasons intelligence test scores are used. However, in some school districts that apply a point value to scores, a student with a higher intelligence has a better chance of being selected into the program.
### TABLE 4
THE USE OF TESTING IN SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Test Criterion</th>
<th>Number of School Districts Using this Criterion</th>
<th>Percentage of School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence Test</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>Reading Achievement</td>
<td>12</td>
<td>39</td>
</tr>
<tr>
<td>Mathematics Achievement</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Differential Aptitude Test</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>General Aptitude Test Battery</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Iowa Test of Educational Development</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Iowa Test of Basic Skills</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Interest Inventory</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

*Twenty-five School Districts (81%) use one or more of these tests in their Vocational Selection Procedures*

It is interesting to note in the school districts in our survey, only twelve districts, or 39 per cent use aptitude testing. In the joint vocational schools 67 per cent use aptitude testing. The literature revealed that aptitude testing is one of the major areas to consider when selecting students. Twenty per cent of the joint vocational schools and only three per cent of the school districts use any type of interest inventory. The literature stated that selection should be based on *interest, ability, and aptitude.*
### TABLE 5

**THE USE OF TESTING IN JOINT VOCATIONAL SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION**

<table>
<thead>
<tr>
<th>Test Criterion</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Joint Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence Tests</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>General Aptitude Test Battery</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Reading Achievement</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Mathematics Achievement</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Differential Aptitude Test</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>English Achievement</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Interest Inventory</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Ohio Vocational Interest Survey</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

*Eleven Joint Vocational School Districts (73%) use one or more of these tests in their Vocation Selection Procedures*

The use of the personal interview, as a Vocational Selection criterion, is presented in Tables 6 and 7.

**Interpretation of Data**

There is a definite contradiction between the literature and the actual practiced procedures in the use of the interview as a selection criterion. Only 48 per cent of the school districts, and 33 per cent of the joint vocational school use the personal interview. The literature
TABLE 6

THE USE OF PERSONAL INTERVIEWS IN SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Personal Interview Criterion</th>
<th>Number of School Districts Using this Criterion</th>
<th>Percentage of School District Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Instructor</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>School Counselor</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Coordinator of Division</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Director of Vocational Education</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Supervisor of Vocational Education</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

aFifteen School Districts (48%) use one or more of these interviews in their Vocational Selection Procedures.

TABLE 7

THE USE OF PERSONAL INTERVIEWS IN JOINT VOCATIONAL SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Personal Interview Criterion</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Joint Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Counselor</td>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>

stressed the need for individual conferences and indepth interviews. If students are to be chosen on the basis of their own interests and aptitudes, and we have already seen the small use of interest tests, how can students indicate an interest without an interview?
Interviews are time consuming, but should be of prime importance to the student and the school. The literature pointed out that the whole process of selection is vital to the student.

Tables 8 and 9 indicate the use of recommendations in school districts and joint vocational school districts as a vocational selection criterion.

**TABLE 8**

**THE USE OF RECOMMENDATIONS IN SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION**

<table>
<thead>
<tr>
<th>Recommendation Criterion</th>
<th>Number of School Districts Using this Criterion&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Percentage of School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Teachers</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>Counselors</td>
<td>13</td>
<td>42</td>
</tr>
<tr>
<td>Industrial Arts Teacher</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Principal</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

<sup>a</sup> Twenty School Districts (65%) use one or more of these recommendations in their Vocational Selection procedure.

**Interpretation of Data**

Sixty-five per cent of the school districts and 73 per cent of the joint vocational schools use some form of written recommendations in the selection process. The literature did not reveal that the use of written recommendations was a positive or a negative factor in the selection process. In practice, it appears that this is a widely used
TABLE 9
THE USE OF RECOMMENDATIONS IN JOINT VOCATIONAL SCHOOL
DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Recommendation Criterion</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Joint Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Teachers</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>Principal</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Counselor or Principal</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Counselor</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Eleven Joint Vocational School Districts (73%) use one or more of these recommendations in their Vocational Selection Procedure.

criterion. It appears that the academic teachers, who in essence would know less about the potential for success in vocational programs than counselor or industrial art teachers are asked more frequently for their recommendations.

Tables 10 and 11 indicate the use of attendance, as a vocational selection criterion, by school districts and joint vocational school districts.

TABLE 10
THE USE OF ATTENDANCE IN SCHOOL DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Attendance Criterion</th>
<th>Number of School Districts Using this Criterion</th>
<th>Percentage of School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance in Grades Nine and Ten</td>
<td>19</td>
<td>61</td>
</tr>
</tbody>
</table>
TABLE 11
THE USE OF ATTENDANCE IN JOINT VOCATIONAL SCHOOL
DISTRICTS AS A VOCATIONAL SELECTION CRITERION

<table>
<thead>
<tr>
<th>Attendance in Grades Nine and Ten</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance in Grades Eight, Nine, and Ten</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Attendance in Grades Nine and Ten</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Attendance in Grades Eight, Nine, and Ten</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Interpretation of Data

No where in the literature is the topic of attendance considered as a factor in the selection of students, yet in practice it is heavily considered. Sixty-one per cent of the school districts and 54 per cent of the joint vocational school districts use attendance in their selection process. In school districts that use a point value for selection, attendance is given the same value as grades or as aptitude. There were no studies found by this writer that indicated a coorelation between attendance in grades nine and ten and success on the job.

Tables 12 and 13 reflect the use of other criteria in school districts and joint vocational school districts for vocational selection.

Interpretation of Data

It was indicated in the literature that each school district should develop local selection criteria. Tables 12 and 13 reflect that many factors are considered in the selection procedures established by
TABLE 12

THE USE OF OTHER CRITERIA IN SCHOOL DISTRICTS FOR VOCATIONAL SELECTION

<table>
<thead>
<tr>
<th>Other Criteria</th>
<th>Number of School Districts Using this Criterion¹</th>
<th>Percentage of School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisite Courses</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Expressed Student Interest</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Attitude Towards School</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Appearance of Student</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Parent Conference</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Availability of Transportation</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Personal Traits</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Need for Program</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Discipline Record</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Personal Desire</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

¹Twenty-three School Districts (74%) use one or more of these criterion in their Vocational Selection Procedures.

School districts. Seven school districts, 23 per cent, look for an expressed interest on the part of the student, which does follow the state guidelines. In the joint vocational schools, 53 per cent look for student interest.

It appears to this writer that many items that are used in the selection process would be difficult to measure. How do we measure the student's attitude toward school, or his need for the program?
### TABLE 13
THE USE OF OTHER CRITERIA IN JOINT VOCATION SCHOOL DISTRICTS FOR VOCATIONAL SELECTION

<table>
<thead>
<tr>
<th>Other Criteria</th>
<th>Number of Joint Vocational School Districts Using this Criterion</th>
<th>Percentage of Joint Vocational School Districts Using this Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Status</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Expressed Student Interest</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Pre-Requisite Courses</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Recommended Courses</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Hobbies or Work Experience</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Family Hardship or Need</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Student Statement</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

*aFifteen Joint Vocational School Districts (100%) use one or more of these criteria in their Vocational Selection Procedure.

Some of the items used appear to be safeguards for the school. The item is so poorly defined that it could be used as a level to help place students in a program, or to help screen them out. Pre-requisite courses are or can be fundamental to many vocational programs, but what if the pre-requisite course is not offered at the student's home high school? Should the student be penalized for not having had the course?

The physical status of a student is very important to his future employability. Fifty-three per cent of the Joint Vocational Schools use this as a criterion.
**Actual Selecting Process**

Once the criteria have been established, what person or groups of persons has the final decision to accept or reject a student? A variety of practices are being used in school districts and joint vocational school districts. Using summary tables, the information can best be analyzed. Tables 14 through 21 indicate the person or persons in each school district or joint vocational school district that actually make the selection.

**TABLE 14**

SELECTION OF STUDENTS MADE BY ONE PERSON IN SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Titles of Persons</th>
<th>Number of School Districts Use this Procedure</th>
<th>Percentage of School Districts Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home School Counselor</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Director of Vocational Education</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Vocational Guidance Counselor</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Vocational Instructor</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Vocational Guidance Counselor</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Coordinator of Vocational Education</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>47</td>
</tr>
</tbody>
</table>

Tables 14 and 15 indicate 47 per cent of the school districts and 47 per cent of the joint vocational school districts use only one
person to make the final decision as to what students are admitted to the program. In a school district or a joint vocational school district that uses only one person to make the final decision on selection, the person most likely to have the authority is either a counselor or a person with a background in counseling.

Tables 16 and 17 indicate the only common person found on a Selection Committee, composed of two persons, is the counselor. The most common practice of selecting students is given to a committee composed of a counselor and a Trade and Industrial Education instructor.

Tables 18 and 19 indicate on any Selection Committee composed of three individuals, at least one number is a counselor. The practice of using a committee of three is found more often in a joint vocational school than in a school district.

Tables 20 and 21 reflect the use of a counselor and an instructor on any Selection Committee of four or more members.
### TABLE 16
**SELECTION OF STUDENTS MADE BY TWO PEOPLE IN SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS**

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of School Districts</th>
<th>Use this Procedure</th>
<th>Percentage of School Districts</th>
<th>Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselor and Vocational Instructor</td>
<td>7</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home School Counselor and Vocational Guidance Counselor</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselor and Administrator</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home School Counselor and Coordinator of Vocational Education</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational Guidance Coordinator and Vocational Education Director</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>35</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 17
**SELECTION OF STUDENTS MADE BY TWO PEOPLE IN JOINT VOCATIONAL SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS**

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of Joint Vocational School Districts</th>
<th>Use this Procedure</th>
<th>Percentage of Joint Vocational School Districts</th>
<th>Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home School Counselor and Joint Vocational School Supervisor</td>
<td>1</td>
<td>7</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
<td><strong>7</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 18
SELECTION OF STUDENTS MADE BY THREE PEOPLE IN SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of School Districts Use this Procedure</th>
<th>Percentage of School Districts Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home School Counselor</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Vocational School Counselor and Vocational Coordinator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselor, Vocational Instructor and Administrator</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Counselor, Supervisor and Vocational Instructor</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

### TABLE 19
SELECTION OF STUDENTS MADE BY THREE PEOPLE IN JOINT VOCATIONAL SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of Joint Vocational School Districts Use this Procedure</th>
<th>Percentage of Joint Vocational School Districts Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Vocational School Counselor, Joint Vocational School Supervisor, and Joint Vocational School Instructor</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Home School Counselor, Joint Vocational School Counselor, and Joint Vocational School Administrator</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>33</td>
</tr>
</tbody>
</table>
TABLE 20

SELECTION OF STUDENTS MADE BY FOUR PEOPLE IN SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of School Districts Use this Procedure</th>
<th>Percentage of School Districts Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home School Counselor, Vocational Instructor, Administrator and Director of Vocational Education</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Counselor, Supervisor, Vocational Coordinator and Vocational Instructor</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

TABLE 21

SELECTION OF STUDENTS MADE BY FIVE PEOPLE IN JOINT VOCATIONAL SCHOOL DISTRICTS FOR VOCATIONAL PROGRAMS (JVS)

<table>
<thead>
<tr>
<th>Title of Persons</th>
<th>Number of Joint Vocational School Districts Use this Procedure</th>
<th>Percentage of Joint Vocational School Districts Use this Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home School Counselor JVS Counselor JVS Instructor JVS Supervisor and JVS Director</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Home School Counselor Home School Principal JVS Counselor JVS Instructor and JVS Director</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>
In the school districts and joint vocational school districts that participated in this study, there appears to be no standard pattern as to what person or persons has the authority to accept or reject a student for admission to a vocational program. The tables fourteen through twenty-one, reflect the following information.

(1). Forty-seven per cent of the schools districts and 47 per cent of the joint vocational school districts use only one person to make the final decision as to what students are admitted to this programs.

(2). In a school district or a joint vocational school district that uses only one person to make the final decision, the person most likely to have the authority is either a counselor or a person with a background in counseling.

(3). The only common person found on a selection committee of two or more persons, is a counselor.

(4). There are no guidelines as to what person or persons should have the authority to select students for vocational programs.

(5). The second most common practice of selecting students is given to a committee composed of a counselor and a vocational instructor.

**Proposed Selection Criteria**

The proposed selection criteria will be based on the federal and state guideline, the review of literature, and the actual procedures now being used throughout Ohio in the school districts and joint vocational school districts.
Criteria

1. Age

The first criterion that all students must meet is stated by law. A student must be at least sixteen years of age prior to January 1 of the year of his entrance into the program. This information can be verified by either viewing the student's school records or by requiring a copy of his birth certificate.

2. Normal, Average Student

A student must not be enrolled in a special education program, or in a modified program. The two basic ways to verify this requirement are the use of the academic aptitude scores and a review of the student's class schedule. The laws are so written that a student who has been in a modified program up to grade ten, can be enrolled in a Trade and Industrial Education Program, if he, in grades eleven and twelve, is enrolled in regular classes for his academic work.

3. Graduation Requirements

A student must comply with the minimum requirement for graduation from high school. Probably the best way to determine this is to screen the student's record for his credits earned. If a student is deficient in credits earned, the counselor could interview the student and explore the possibility of enrolling in a summer program to achieve the needed requirements.

4. Interest and Ability

A student must be selected on the basis of his interest and
The ability to profit from the program. We will first consider the interest aspect of the student. There seems to be two ways to explore interest. The first way would be to have the school counselor interview in depth the interest and aspirations of the student. A parent conference should also be held to discover any underlying facts not brought out in the student interview. This method would be very time consuming and the final decision as to whether the student had a sincere interest in the program would be left to the judgment of the counselor. The other procedure that could be used would be in the form of an interest inventory. There are many commercial tests, inventories, or scales that claim to indicate interests. The Ohio Vocational Interest Survey (OVIS) is well suited for the task of exploring the interest of the student. The OVIS helps students choose a high school program, helps the student examine his interests, and helps administrators plan curricula. The OVIS combines an interest inventory and a Student Information Questionnaire. By combining data on a student from the interest inventory with that from the questionnaire, a comparison can be made to check the consistency between measured interests and expressed interests, subject areas preferences, and educational plans.

The second part of this area deals with the ability of the student to profit from the program. It was found in Tables 4 and 5 that 39 per cent of the school districts and 67 per cent of the joint vocational
school districts already use an aptitude test. The two tests used are the General Aptitude Test Battery (GATB) and the Differential Aptitude Test (DAT). As one examines the two tests he finds that the GATB is by far a better means of identifying and measuring abilities that relate to success in various occupations. The GATB not only reports results in eight areas and intelligence, but it is also geared in with the Dictionary of Occupational Titles (DOT). It has been stated that a danger associated with the use of the GATB in secondary schools is related to its potential for becoming primarily a tool for screening and selecting students for placement in various school programs. The focus on using GATB results might be more appropriately geared to helping students develop greater competency in identifying and defining personal goals. If the GATB is used as one of many tools for selecting students for vocational programs, then the information presented to the student may take on a more personal significance.

If students, according to law, are to be selected on the basis of their interest and their ability to profit from the programs, it is recommended that the following procedures be followed: Administer to the student, by the school counselor, the Ohio Vocational Interest Survey and the General Aptitude Test Battery.

5. Potential for Achieving in the Program; to be Eligible for Employment

Abilities, personal traits, and individual characteristics required of a worker (student) in order to achieve average successful job (program) performance are referred to as worker traits. In the Dictionary
of Occupational Titles six distinct worker trait components are: training time, aptitudes, interests, temperaments, physical demands, and work conditions.

The Dictionary of Occupational Titles data can be used by the school counselor in that it presents the specific capacities and abilities required of the worker in order to learn to perform certain tasks or duties considered necessary for job success. The specific capacities and abilities required of an individual to learn or perform adequately a task or job duty are presented in a form that is used by the GATB.

Since both the GATB and the OVIS are tied to the classification structure of the DOT, their value as companion instruments which relate the personal assessment of interest and aptitude to the world of work sets them apart as key tools for vocational guidance. Any personal traits or occupational or labor market information which can be related to the DOT can be related to the OVIS or GATB due to the mutual use by these instruments of worker trait groups and the related data-people-things concept.

On page 71 this writer has developed a sample instrument that could be used to collect the selection criteria data.

The information on the profile sheet encompasses all of the needed data. The sample sheet has been developed using information available from the GATB, the OVIS and the DOT. This type profile can be developed on any Trade and Industrial Education area. The sample is based on automotive mechanics.

Once the information has been collected, records reviewed, tests
<table>
<thead>
<tr>
<th>Name</th>
<th>Home High School</th>
<th>Date of Birth</th>
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<tbody>
<tr>
<td>Last</td>
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<td></td>
</tr>
<tr>
<td>First</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Number</td>
<td>Street</td>
<td>Zip</td>
</tr>
<tr>
<td>Home Phone Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type Program You Are Now Enrolled (Circle One)</td>
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<td></td>
<td>Regular</td>
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### Ninth Grade Major Subjects

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<thead>
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<th>Subject</th>
<th>Credits Earned</th>
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<td>Science</td>
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<tr>
<td>Math</td>
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### Tenth Grade Major Subjects

<table>
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<th>Credits Earned</th>
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<tbody>
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<td>History</td>
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<table>
<thead>
<tr>
<th>Interviewed by</th>
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</tr>
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<tr>
<td>Counselor</td>
<td>Teacher</td>
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### General Aptitude Test Battery

<table>
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<tr>
<th>DOT</th>
<th>G</th>
<th>V</th>
<th>N</th>
<th>S</th>
<th>P</th>
<th>Q</th>
<th>K</th>
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<th>M</th>
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### Ohio Vocational Interest Survey

<table>
<thead>
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<th>DOT</th>
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<th>P</th>
<th>T</th>
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</thead>
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<td>X</td>
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</tr>
<tr>
<td>L0</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Projected Success in Automotive Mechanics: X

---

**Figure 1.**—Proposed Student Application And Profile For Automotive Mechanics
administered, the next step of the procedure is to evaluate what person or persons should review the material and either accept or reject the application. The literature did not reveal what person or persons should have the duty of screening the applications. In the actual practice, it was found that 47 per cent of the school districts and joint vocational school districts use only one person, and that person was a counselor.

The school counselor normally has contact with all students, either in personal conferences, in testing, or in some form of school activities. Within this relationship a counselor forms opinions of students which might not let him be truly objective when evaluating him for a vocational program. The literature revealed that many times students are placed because of feelings or attitudes, rather than facts. With this reasoning in mind, this writer proposes that a committee of two people, the counselor and Trade and Industrial Education class instructor, evaluate the applications together. The instructor has the responsibility of working with the student for at least one-half of a school day for a two year period. The instructor would be better qualified to examine the results of the tests in an objective manner.

Summary

The proposed selection criteria have been established, based on the findings in Chapter Two. A student profile sheet that encompassed all of the needed information has been designed. The operational design has been presented.
Chapter Four of this study will relate the methodology of the evaluation procedures and the results of the evaluation. Chapter Five will state the conclusions and recommendations of this study.
CHAPTER IV

EVALUATION OF THE PROPOSED SELECTION CRITERIA

Introduction

Qualitative evaluation is defined by the writer as expert judgment by professionals on the criteria which are rationally and deliberately developed and presented to them for their evaluation.

The rationale underlying this type of evaluation is that the criteria as synthesized by the writer, can be improved and can gain a certain degree of validity by receiving substantial agreement from a panel of experts. From this evaluation, areas of the selection criteria where this writer has bias or has missed a necessary component part, will be identified. The end product of this evaluation should be stronger, more defensible selection criteria.

Qualitative Evaluation Design and Methodology

Having stated the rationale for qualitative evaluation, the methods utilized in securing the panel of experts and the techniques used to gain their evaluation, are now detailed.

Thirteen professional persons located within the State of Ohio who could perform some vital aspect of an evaluation of the proposed selection criteria were identified. These persons represented the public schools, the universities, the State Department of Education
and outside agencies. The evaluators used in this study were chosen because of their interest in the selection of students for Trade and Industrial Education Programs. During the past four years this writer has been in constant contact with these evaluators. Their professional background, judgment, and interest in students made them an asset to this study.

The evaluators were professional persons who by their present position and past experience, were uniquely qualified to evaluate the proposed selection criteria. The qualifications of each panel member are detailed in Appendix B.

All evaluators were contacted by telephone to explain the program and the function this researcher was asking each evaluator to fulfill. Upon agreement to participate, each person was sent a copy of the proposed selection criteria, with the background information and a letter containing five questions on which he could make his evaluation. The five primary questions were as follows:

1. What do you (the evaluator) view as the strengths of these proposed selection criteria?
2. What do you view as the weaknesses of these proposed selection criteria?
3. Has any potential selection area been missed?
4. Are the criteria clear and operational?
5. Do you feel that the selection criteria are valid for predicting student success in the programs?

The evaluators were urged to make any other statements or reactions
on topics not included in the above five general questions.

A date and time for an interview with each evaluator was established at the time of the initial contact. The format of each interview included a review by this writer of the findings of the first three chapters of this dissertation. Each interview lasted approximately two hours. The following section of this chapter reports the results of the evaluation by the panel of experts.

Evaluation of the Selection Criteria by the Panel of Experts

This section will report the results of each interview with the evaluators. It will be concluded by a summary section detailing the most common areas of agreement of the total group. No interview will be related entirely.

The first group of evaluators represented the public schools. This group was composed of teachers, supervisors, administrators and counselors. Each member of the group was directly involved, now or in the past, with the selection of students for Trade and Industrial Education Programs. Their background and experience are detailed in Appendix B.

Mr. David Stewart, Interview

Mr. Stewart, Assistant Principal at Central High School and directly responsible for the programs in the Vocational and Occupational area, indicated the proposed selection criteria were very sound. The use of the General Aptitude Test Battery (GATB), as a screening device was of particular interest to him. He felt that once the test results were profiled, it would give the counselor another tool to use in
evaluating a student. Even if the student could not meet the requirements for his first choice, it would still leave other career opportunities open to him.

Mr. Stewart indicated that he would like to know the shop area programs (Industrial Arts) that the student had taken in grades nine and ten. He felt that by viewing just the academic subjects of the student, the results would not present the complete educational background of the student.

Concerning attendance, he felt that this was very necessary in any selection process. Not only should the form indicate the number of days absent and tardy, but mainly why the student was absent. (truancy, illness, suspended).

Another area that he indicated should be considered would be pre-vocational subjects. He stated that he was starting some new tenth grade pre-vocational course for interested students. He felt that exposure to a vocational program in grade ten might better help the student and the staff evaluate the long range plans of the student. He felt a student should not be penalized for not taking the course, but he would like to see as many students as possible enroll in the pre-vocational course.

Mr. Stewart was not concerned about the administration of the GATB, because he had enough available counselors to administer the test. He has administered the Ohio Vocational Interest Survey (OVIS), in trial classes and was very satisfied with the results.

He definitely felt the instructor should be involved with the final
selecting. The interview was concluded on the note that Mr. Stewart would be willing to use the selection criteria, as developed in this dissertation, for his selection instrument the next school year.

In summary, Mr. Stewart felt such an instrument was needed and that if the attendance data and industrial arts grades were indicated it would be an excellent devise to use. The major strength of such an instrument is the opportunity that it presents to all students. Even if a student is not selected for a program, the profile presents the counselor and the student data from which they can explore other career areas.

Mr. Christopher C. Clark, Interview

Mr. Clark is a counselor in a high school that sends students to a joint vocational school and also to a contract public school. He has had experience working in both inner-city schools and outer-city schools.

Mr. Clark stressed the importance of knowing the actual performance of the student in the classroom setting. He felt that a teacher rating form should be devised on which a teacher could indicate such traits as interest, honesty, truthfulness and performance. He also felt the personal interview by both the counselor and the instructor was a necessary component of any selection criteria.

Mr. Clark indicated that each instructor should design his own selection criteria. He did not feel that any form designed could be used to cover all areas.

The role of the counselor, according to Mr. Clark, should be to provide students with the occupational materials available and to
and to recruit students but that the selection should not be made by counselors but by the instructor.

Concerning the General Aptitude Test Battery (GATB) and the Ohio Vocational Interest Survey (OVIS), he stated that they should be used in junior high schools as pre-vocational planning but they should not be used as selection criteria.

Mr. Clark rejected the selection criteria as it was presented. He stressed the point that test results do not always relate the correct results.

School grades should definitely be a part of the criteria used by an instructor. Mr. Clark felt that grades do indicate the ability of a student to succeed in school and most certainly in vocational programs. He stated that in his experience, a student failing academic subjects would also fail in the vocational program.

In summary, Mr. Clark rejected the total selection criteria. He suggested that a teacher rating form be devised to collect the traits of a student. He stressed the importance of grades and also the importance of the interview with the instructor. He felt that the counselor should not be involved in the selection of students but only in providing needed service to the instructor.

Mr. Jack L. Baker, Interview

Mr. Jack L. Baker, Coordinator of an Occupational Work Experience Program, stressed the personal interview aspect of the criteria as the major strength in any selection process. He felt that the interview was the key factor in selection as far as the instructor is concerned,
but he indicated that the student probably did not profit from this experience.

Mr. Baker stated that he was not familiar with the General Aptitude Test Battery (GATB), nor was he familiar with the Ohio Vocational Interest Survey (OVIS). He asked for a brief explanation of the tests. (The interviewer explained the tests in detail). After the explanation, Mr. Baker stated that he would like to see these two tests administered to all ninth grade students.

In the area of attendance, Mr. Baker felt it was necessary to indicate on the instrument, the student's attendance record. This was to include not only days absent, but times tardy.

Discussing the student's school attitude, Mr. Baker felt this was another area to consider. He did not present any specific ways to evaluate attitude, but stated that he reviews personal traits as indicated on the student's permanent record and then discusses the student with the principal and the student's teachers.

Mr. Baker then indicated that the selection criteria presented to him seemed clear and could be placed into operation with any Trade and Industrial Program, with the exception of the Occupational Work Experience Program. He stated again, that the counselor and the instructor should work together as a team in the final selection of the student. He indicated that he was not concerned with the past academic grades, but would like to know what industrial arts courses the student had taken in school.

In summary, Mr. Baker felt the selection criteria were well
Mr. Ron Jones, Interview

Mr. Jones is Vocational Guidance Coordinator for the Westerville School System. He stated that the real strength of the criteria were the criteria itself. The using of positive instruments, such as the General Aptitude Test Battery (GATB), should indicate to the student that we are trying to select those that will profit from the training.

Mr. Jones indicated that his past experiences as principal of a vocational school biased his remarks concerning this instrument. He stated that attendance must be indicated on the form, along with why he missed an excess number of days, if he did. Mr. Jones felt that the academic grades should appear on the form and should be used as a selection criterion. Concerning intelligence test scores, Mr. Jones stated that the "G" factor of the GATB would be sufficient evidence to cover this area.

Mr. Jones felt that the Ohio Vocabulary Interest Survey (OVIS), was not needed as a criterion. He stated that it would be better to determine the student's interest by a personal conference. He indicated the OVIS is an excellent instrument to use at grades nine or ten for vocational planning but felt it should not be a criterion for selection.

Mr. Jones, based on his past experience, felt that the interview by the instructor was the key criterion to use in selection. He saw the role of the counselor as providing the needed background material...
on the form but felt the instructor should have the power to accept or reject a student.

In summary, Mr. Jones felt the selection criteria, as established, were a step in the right direction and with certain modification, could be used. He strongly urged that all persons involved in using the selection criteria should receive in-service education as to how to use the information on the instrument.

Mr. James R. Jenks, Interview

Mr. Jenks, indicated that during the state-wide supervisors conference during the summer of 1970, the topic of selection was a key discussion area. He felt that everyone was concerned, but that no one had really examined the literature, nor had they surveyed the state to see what others were doing.

Mr. Jenks was familiar with the General Aptitude Test Battery (GATB), and the Ohio Vocational Interest Survey (OVIS), and indicated that these two instruments would be very beneficial to any selection criteria. He stated that the "G" score was much more reliable than the intelligence tests scores on the regular schools records.

He felt that recommendation should not be used, because normally the academic teachers do not know what it would take to succeed in a Trade and Industrial Education Program.

The area of attendance, should appear on the form. He said that the reasons why a student had been absent, should be stated.

The personal interview was one of the strongest points of the
selection criteria. Mr. Jenks felt that the instructor needed to have a personal interview with the student. He felt that the many hours the two would have to work together was evidence enough that a personal meeting was necessary before acceptance into the program. He indicated that by the nature of his position, he had discussed the personal interview area with all of his instructors and they were in complete agreement that they wanted to talk with the student before he came into the program.

A key point, according to Mr. Jenks, that was missing from the form, was any statement concerning the medical or physical handicaps of the student. He wanted this to appear on the form. This should not act as a criterion to keep the student out, but would help the instructor know if, with a certain handicap, the student could find employment upon completion of the program. He stated that the instructor could ask the student about any physical handicaps in an interview. He concluded that if the physical information did not appear on the form, then the interview between the instructor and the student was definitely necessary.

He said the criteria, as presented to him, were short, to the point, easy to read and workable. He like the simplicity of the form.

In summary, the area of attendance should be added and the personal interview was necessary. He agreed that the selection by the counselor and the instructors would lead to better placement of students in the programs.
Mr. William Mustaine, Interview

Mr. Mustaine, who has had experience in selecting students for vocational programs in inner-city schools and outer-city schools, began his comments by stating that the earlier we could expose a student to the program, the better selections could be made. He felt a field trip to the areas in elementary school would be the first step, plus a real concentrated effort while the student was in junior high, would be the second step. He felt the instrument was simple, concise and objective.

Mr. Mustaine, indicated that he wanted to know the grades a student had received in his academic subjects. He felt that would help the counselor in exploring other possibilities. He stated he wanted to know the intelligence test scores, not just the "G" score on the General Aptitude Test Battery (GATB).

Mr. Mustaine stated that he didn't feel any interest tests were valid to use. He felt a discussion of the students interest would be the indicator to use in selection. He definitely felt the personal interview by the instructor was a key point.

Mr. Mustaine questioned whether the GATB could be used to predict success in the program. He felt for many students do not perform well on tests and this might make the results invalid. He was also concerned about who would administer the GATB. He felt the average school counselor did not have the time to administer it.

According to Mr. Mustaine, the real strength in the instrument was the simplicity. The needed information was presented, with the exception of the grades. He felt that counselors should receive more information
concerning vocational programs and what type students instructors felt could profit from the training.

In summary, Mr. Mustaine saw a real need to indicate on the form the grades a student received. He felt grades should be part of the selection criteria. He also felt the use of an interest test would be a waste of time and money. He indicated the real strength of the proposal is in the interview. He did state, that if the criteria were used in his school system, he would be glad to use it but would want to re-evaluate the criteria after a year or two.

The second group of evaluators represented the universities. This group was composed of a doctoral candidate, an instructor and a teacher education representative. Each member of the group has been an instructor in a public school Trade and Industrial Education Program. Their background and experience are detailed in Appendix B.

Mr. Donald L. Karr, Interview

Mr. Donald L. Karr, Interview

Dr. Karr is a teacher-educator in Trade and Industrial education. He indicated the real strength of the selection criteria, as proposed, are to be found in the General Aptitude Test Battery (GATB), scores and in the personal interview of the student by the instructor. Concerning the GATB, Dr. Karr definitely felt the profiled scores would help identify quality students. He viewed the proposed chart of the GATB scores as meaningful, but felt it would be easier to understand if presented in Stanine scores.

Dr. Karr was in complete agreement with having the instructor hold a personal interview with the student, but he felt the final decision
to accept or reject a student, should be a team decision. He felt the
counselor and the instructor should jointly decide on the placement of
the student.

Dr. Karr was not in favor of using the Ohio Vocational Interest
Survey (OVIS) as a selection criterion. He stated that the instructor,
while in conference with the student, could pose questions concerning
interest that would better determine a student's interest. He felt
the OVIS should be used as a guidance instrument in a junior high
school vocational exploration project.

Dr. Karr indicated that grades should be listed on the form and
that they should be used in any selection criteria. He felt grades
are an indicator of potential success and should be viewed by a selection
committee.

He felt that the selection criteria could be used in any school
system but felt that each school district would rather develop their
own selection procedures.

Dr. Karr felt that the student should be exposed in elementary
and junior high school to the various trade areas. He concluded that
this type experience would help them with their future career decisions.

In summary, Dr. Karr expressed a real concern that these selection
criteria be made available to all school districts to study. He
suggested that the OVIS be eliminated from the instrument. He strongly
urged the use of the GATB in either grades nine or ten.

Mr. Frank E. Reynolds, Interview

Before discussing the selection criteria, Mr. Reynolds aimed his
remarks at some general areas of his personal concern. He stated that any counselor helping in the selection of students for vocational education, should be qualified vocational education counselors. He stated that the counselor should have attended one of the summer vocational guidance workshops and should have had work experience in areas outside of education. He felt that the counselors he has known were good college counselors but really did not know or understand vocational education.

Referring to the selection criteria, Mr. Reynolds stated that the form should list the subjects that are required by the high school for graduation, rather than just the courses the student had taken. This would indicate to the counselor and the instructor, the course that a student must still take in addition to his vocational program. Mr. Reynolds was highly impressed with the idea of not indicating the grade in a subject but by just listing the credits earned. He felt that grades are not necessary to know when selecting a student. He felt that interest and ability are the key area. The General Aptitude Test Battery (GATB), according to Mr. Reynolds, will reflect if the student will be able to succeed in the program. He also felt the Ohio Vocational Interest Survey (OVIS) would be a good instrument to use to determine interest. He indicated that the OVIS scores have been made to coincide with the Dictionary of Occupational Titles and that this would also work well with the result of the GATB.

He indicated a desire for something concerning the medical status of the student to be present on the instrument and this information
should be part of the selection criteria.

The interview by the instructor was the prime factor in the selection of students for any program.

Mr. Reynolds felt that the selection criteria were very good and would be workable in any school district.

In summary, Mr. Reynolds stated that if a statement concerning the physical status of a student were included, he would be in favor of using the instrument.

Mr. Richard M. Outcalt, Interview

Mr. Outcalt indicated that not having an intelligence score on the sheet is definitely a good idea. He felt that too often students are accepted or rejected because of their intelligence. Using the "G" score of the General Aptitude Test Battery (GATB), will relate any needed information to the instructor concerning aptitude.

Mr. Outcalt stated that the GATB is probably the best instrument to use as a screening device. He felt the scores would or could serve two general purposes: a criterion for selection and an indicator of other job areas to consider.

Concerning the Ohio Vocational Interest Survey (OVIS), Mr. Outcalt stated, on the basis of his background in teaching, rather than using an interest test, he would rather have a conference with the student and discuss his interests.

Mr. Outcalt indicated the real strength of the selection criteria was to be found in the personal interviews between the instructor and the student. He stated that it had been his experience that the
instructors in the joint vocational schools do not have an opportunity to hold a conference with each individual. He saw this as a real weakness and that by using this selection criteria, it would become necessary for the administration to arrange student interviews.

Mr. Outcalt stated that some instructors like to view the student's grades but that he doesn't feel it is necessary. He felt poor grades only lead to the screening out of a student.

In summary, Mr. Outcalt felt the GATB should be used, the OVIS should be eliminated and the personal conference is very necessary.

The third group of evaluators represented the State Department of Education. The group was composed of a representative of the Division of Vocational Education and a representative of the Division of Guidance and Testing. Their background and experience are detailed in Appendix B.

Mr. George C. Kosbab, Interview

Mr. Kosbab, who is currently coordinating activities for a state-wide evaluation program in vocational education, provided this researcher with an input from the State level. Using his background in evaluation, he indicated that the selection criteria were excellent but he felt that some minor changes should be considered.

Mr. Kosbab felt that the key to the successful operation of this selection criteria would be the in-service education that would take place before a school system adopted the plan. He suggested that all Trade and Industrial teachers, school counselors and principals be involved in a series of workshops on how the criteria were to be used.
Mr. Kosbab felt that too many good plans in education do not work because of a breakdown in communications.

He stated that the date of birth and the type program the student was now enrolled in, should be kept as the first two criteria. He felt that it was not necessary to list the courses that a student had completed but rather to indicate the total credits he had earned.

Mr. Kosbab felt that instead of a profile for the General Aptitude Test Battery (GATB), that we should list the area and the average performance number. (G-3, V-3, S-2). He felt that this would be easier to read and evaluate.

Concerning the Ohio Vocational Interest Survey (OVIS), Mr. Kosbab stated that in the program he was now coordinating, each ninth grade student in Ohio would be required to take the OVIS test. Therefore, he felt the result could benefit the school and student in two areas. He stated that the cost for the OVIS was to be paid by the State and that, therefore, it would be available to all students. He stated that the OVIS results should only be classified as high, average or low.

The conference with the instructor is the key to placement. The counselor should collect all of the data and present it to the instructor. The instructor should have the final authority, after a conference, to accept or reject a student.

From his past experience, Mr. Kosbab felt that physical disabilities of a student should be considered but he felt that this should not be on the instrument. He suggested that the counselor and the instructor work out a list of questions that the instructor should use when he has the conference with the student. One of the questions should relate to
physical disabilities.

Mr. Kosbab stated that he would like to see the attendance record of the student but that this should be used in the interview but not as a selection criterion.

In summary, Mr. Kosbab felt the instrument had tremendous possibilities. He felt it should be tried in a select number of school systems for a year or two before it was presented to the whole state. Mr. Kosbab and this writer spent approximately four hours discussing this instrument.

Mr. Richard E. Green, Interview

In his present position as Field Supervisor with the Division of Guidance and Testing, Mr. Green travels throughout the State conducting workshops for counselors in the administration of the General Aptitude Test Battery (GATB) and the Ohio Vocational Interest Survey (OVIS).

Mr. Green stated that the criteria, as presented in this dissertation, would be excellent to use in a junior high school career exploration program. He felt the criteria would not be useful in vocational selection. He indicated the GATB norms are based on people working at a specific job and, therefore, the norms should not be related to the student wishing to enter a program. Mr. Green stated that if someone would develop norms based on students as they begin a training program and then follow through for a number of years until they are on the job, we could possibly profile acceptable criteria based on the GATB.

Mr. Green stated it was not possible, in his opinion, to design a valid set of criteria for the selection of students for a Trade and Industrial Education Program.
In reference to the OVIS, Mr. Green indicated it was an excellent guide but should not be used for selection. He based this remark on the foundation that by experience and education, interests change. He strongly urged that the OVIS not be used in the selection process.

Concerning the teacher interview, Mr. Green felt it was a good criterion but that teachers should not have the final authority to accept or reject a student for a program. He strongly stated that any student desiring to enter a program should be accepted. He stated that the problem is not selecting students for programs but how to build enough facilities to accommodate all the students that desire the training.

In summary, Mr. Green indicated that it would be, in his opinion, impossible to design a valid set of selection criteria for Trade and Industrial Education Programs. He felt we should be more concerned with pre-vocational experiences in the elementary and junior high schools. Through experience in the earlier grades and through the use of such instruments as the GATB and OVIS, a student would be better equipped to make a decision concerning vocational programs.

The fourth group of evaluators represented agencies outside the public schools. It was felt by this writer that outside agencies, who have had experience in selecting persons for vocational training programs, would add a higher degree of validity to this study. The group was composed of a representative from the Vocational Planning Center and a representative from the Manpower Development and Training Center.

Under the Manpower Development Training Act (MDTA), the Vocational
Planning Center, in the Columbus area is charged with screening students for enrollment in Manpower Programs.

This writer talked with Mr. Jack Harris, Director of the Vocational Planning Center and he indicated that one of his staff members, Mr. Michael Sheets, is the supervisor in charge of screening. Mr. Sheets agreed to act as an evaluator for the proposed selection criteria.

Mr. Michael D. Sheets, Interview

Mr. Sheets stated that his office is directly responsible for placing students in training programs. He stated that he must have valid reasons for placing a person in a MDTA Program. The basic instrument used is the General Aptitude Test Battery (GATB). Mr. Sheets indicated that the GATB is geared to function with the Dictionary of Occupational Titles and, therefore, is useful as an instrument for screening applicants. Mr. Sheets felt that the public schools were also limited to the number of applicants they could take in any program, as in the case of the MDTA program.

Mr. Sheets felt he could not comment on the use of grades as a criteria but he indicated that from his experience, he felt a student with the best grades would normally receive placement in a program ahead of someone with lesser grades. He, therefore, concluded that grades should not be used as a criterion. He indicated that if we are to consider ability, then the scores on the GATB reflect, in a sense, the grade a student could make. The intake counselors at the Vocational Planning Center rely heavily on the GATB. Concerning interest, Mr. Sheets indicated that the Kuder Preference Inventory and the Labor
Department Interest Check List had been used in the past, but the results were not valid to use in placement. He felt the Ohio Vocational Interest Survey had the potential but that he had not actually used it in his screening process. The intake counselors rely on the spare time activities of the person as a basis for interests.

Concerning physical handicaps, Mr. Sheets felt it would be better to determine this in the interview, rather than to have it expressed on paper. He said the people whom he has placed, will talk about physical handicaps but will not list them on paper.

In many cases, according to Mr. Sheets, the student should be interviewed by the instructor. He definitely felt that this would be a major factor in the public school setting.

Mr. Sheets felt the selection criteria were brief, specific and could easily be used by any counselor. He concluded that any such innovation would require in-service education for those involved with using the criteria.

In summary, Mr. Sheets stated that the criteria established probably combined the best information we now have to predict success in a program. He stressed the points of in-service education and the need for a personal interview by the instructor. He then suggested that this writer contact a counselor in the MDTA Programs for his comments.

This writer contacted the MDTA Program Supervisor, Mr. James Bauer, for permission to interview one of the counselors. The following interview was with John J. Hromadik. Upon reviewing the first three chapters of the dissertation and explaining the function that he would
play, Mr. Hromadik agreed to study the selection criteria and act as an evaluator.

Mr. John J. Hromadik, Interview

Mr. Hromadik stated that any vocational program should begin with an early exploratory program, possibly in elementary school. The total program should involve orientation, field trips and information giving.

The idea of actually trying to select the students who would benefit most from the program served to impress Mr. Hromadik the most. He felt that many times students are just placed in a vocational program to get them out of the regular academic program.

He indicated that the selection criteria were very strong, because they did take into consideration all of the laws, research and actual practices being used. Mr. Hromadik was not concerned about attendance before the program but felt that a close check should be kept after the student was in the program.

The General Aptitude Test Battery (GATB), according to Mr. Hromadik, is probably the best instrument to use in determining job success. To strengthen the GATB results, Mr. Hromadik suggested that the reading and mathematic achievement scores be included on the form. Concerning the personal interview, he suggested that the instructor and the counselor hold separate interviews with the student and then evaluate the decision together as to acceptance or rejection of the student.

He felt the criteria were very clear and operational. Even if a student was not selected for a program, the counselor would have data
available to better counsel the student in another area.

In summary, Mr. Hromadik felt the selection criteria could be placed into operation as it was developed by the writer. The strong points of the criteria are the GATB and the personal interview.

**Summary of Evaluation**

There are many positive comments made about the proposed selection criteria. The following comments reflect the opinion of the majority of the evaluators as to the strengths of the proposed selection criteria.

The majority of the evaluators felt:

1. the personal interview, by the instructor, is the most important component of the selection criteria.

2. the criteria were presented in clear and operational form.

3. the selection criteria are geared to the stated objectives which have been defined by law.

4. the counselor and the instructor should work as a team in the selecting of students.

5. selection criteria are definitely needed in our Trade and Industrial Education Programs.

6. the selection criteria are valid for predicting student success in the program.

7. the General Aptitude Test Battery presents significant data to use in a selection criteria.

The major improvements needed within the proposed selection criteria seen by the majority of the evaluators were:

1. a statement concerning any physical handicaps or limitations
of the student.

2. a summary of the days absent and times tardy. A statement should accompany the data explaining why the student was absent.

3. a complete elimination of the Ohio Vocational Interest Survey as a criterion.

Each evaluator had certain comments that he felt should be stressed. This, of course, reflects his past duties, responsibilities, training and attitudes. Some of these comments are indicated below.

Several evaluators saw the need for expanded junior high and elementary school vocational exploration programs. Through education and experience, our students would gain insights that would benefit them in future career choices.

A few evaluators suggested that pre-vocational programs be established at grade ten to give the student exposure to vocational aims, objectives and programs.

A majority of the evaluators rejected the OVIS as a criterion but felt it should be used in junior high school as a vocational guidance instrument for vocational planning.

Two evaluators stated that it was important to receive recommendations from the student's teachers. These evaluators felt that the personal traits of the student should be evaluated by those teachers that had been exposed to the student in class.

Finally, it was suggested by some evaluators that if selective criteria were placed into operation, an in-service training program
for all persons involved with using the selection criterion would be very necessary.

**Qualitative Evaluation in Perspective to Actual Selection Criteria Being Used**

It was found in Chapter III that 61 per cent of the school districts and 40 per cent of the joint vocational school districts use academic grades as a selection criterion. The majority of the evaluators of this study rejected the use of academic grades as a selection criterion.

Concerning Intelligence scores, it was stated that 45 per cent of the school districts and 53 per cent of the joint vocational school districts use it as a selection criterion. The evaluators of this study rejected this criterion.

A personal interview by the instructor is used in 26 per cent of the school districts but it is not used in the joint vocational school districts.

All of the evaluators of this study indicated that the personal interview by the instructor is a necessary part of a selection criteria. The majority of the evaluators rated personal interview as the key criterion.

Written recommendations are used in 65 per cent of the school districts and in 73 per cent of the joint vocational districts. The majority of the evaluators rejected this criterion. In fact, only two evaluators felt recommendations should be considered.

It was indicated in Chapter III that 61 per cent of the school districts consider attendance as a criterion, while in the joint vocational schools, 54 per cent considered attendance as a selection criterion. The
majority of the evaluators felt that attendance should be considered. The evaluators indicated that an explanation should accompany the attendance record indicating why a student had been absent.

Physical limitations or physical handicaps were not found as a criterion in any school districts. In 53 per cent of the joint vocational school districts it is considered.

The majority of the evaluators felt that physical limitations or physical handicaps should be a criterion in the selecting procedure. There were various ways to determine this: permanent records, signed statement, counselor's interview or in the instructor's interview.

In light of the evaluations of the proposed selection criteria, by the selected evaluators, this writer would suggest the following modification of the selection criteria.

The Ohio Vocational Interest Survey should be eliminated as a criterion. Since the OVIS will become an instrument used in all school districts in the future, the value it holds may be used in exploring career areas in the junior high school. The student's interest in a particular Trade and Industrial Education Program must now become part of the data collected in the personal interview by the counselor and the instructor.

The area of attendance will be added to the selection criteria. The evaluators of this study strongly stated that the past attendance of a student is a good indicator of future attendance. This writer is bias towards not using attendance as a criterion but will yield to the evaluators and to the large percentage of school districts that do use
Name

Name

Last
First
Middle

Address

Number
Street
Zip

Home Phone

Interview by Counselor

Ninth Grade Courses

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Home High School

Date of Birth

Type Program You Are Now Enrolled

(Circle One)

- Honor
- Regular
- Modified
- Special
- Other

Grade 9

Grade 10

Days Absent

Days Tardy

(Explain any Lengthy Absences on Back of This Form).

Interview by

Instructor

General Aptitude Test Battery

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Projected Success In Automotive Mechanics

Indicate Student's Scores

By

Figure 2.—Student Application and Profile for Automotive Mechanics
attendance.

The evaluators felt that a statement concerning the physical handicaps of the student should be used as a criterion. This writer agrees that this is a very important area, however, each student should be treated as an individual case. The information on physical handicaps or physical limitations should be discussed in the interview with the instructor. The instructor is the only qualified person to evaluate if the physical handicap would keep the student from participating in the program and if it would also be serious enough to keep him from being employed in the area.

And, finally, the counselor and the instructor will work as a team to evaluate and select the students for the program.

On the basis of this qualitative evaluation, the instrument to collect the data has been revised. This revised instrument for use in automotive mechanics appears in Figure Two. Additional examples are found in Appendix D.

Summary

This chapter has presented the methodology of the evaluation procedures and also the significant parts of the actual interviews with the evaluators. The findings, based on a summarization of the interviews has been stated.

Chapter Five will detail the conclusions and recommendations of this study.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

In the past, many secondary school students were placed in vocational programs in order to fill class quotas or just to get them out of the academic classroom. Little or no thought was given to the qualifications a student needed to succeed in the program. Vocational education, unfortunately, became the dumping ground for the slow learner, the disciplinary problem student and other unwanted students.

Ohio's recent efforts toward Vocational and Technical Education have provided a new foundation upon which new and expanded programs can be built. The image of vocational education and the image of the vocational education student has begun to change. With the new emphasis on vocational education, more students are applying for vocational training. As more and more students apply for admission to these programs, and with more and more bond issues for education failing throughout the State, the schools in Ohio face the very real problem of which students to select for the programs.

It was the purpose of this study to develop selection criteria for students seeking admission to Trade and Industrial Education Programs.

The review of literature and research revealed a lack of articles on the subject of selection criteria. The literature also revealed a
great diversity of selection criteria which researchers indicate should be used in vocational programs. A survey was conducted in all school districts and joint vocational school districts in Ohio, that offered at least three Trade and Industrial Education Programs, to see how students were being selected. The results of this survey revealed that no standard selection criteria were being used. The selection criteria varied from school district to school district with the only constant factor being the involvement of the school counselor in the selecting process.

Chapter III was divided into three sections. The first section was devoted to studying the guidelines as set forth by the federal and state regulations. The second section of this chapter was used to analyse the selection procedures in the school districts and joint vocational school districts in Ohio. The third and final section of this chapter was used to develop proposed selection criteria based on the above findings.

In Chapter IV, the proposed selection criteria was presented to a group of thirteen educators for a qualitative evaluation. A summary of each evaluators interview was presented. The proposed selection criteria was then revised in light of the qualitative evaluation.

Conclusions

Certain conclusions can be drawn from this study. These are:

1. There is a definite need for selection criteria in school districts and joint vocational school districts for use with those students interested in Trade and Industrial Education Programs.
2. The selection criteria, as developed in this dissertation and evaluated by a panel of experts, can serve as the instrument for selecting students for Trade and Industrial Education Programs in the school districts and joint vocational school districts in Ohio.

3. The interview between the student and the instructor of the program is the most important criterion to use in the selection process.

4. The needs exist in the public schools to place emphasis in the elementary and junior high schools on the exploration of careers. This need was stated in the review of literature and in the interviews with the evaluators.

5. In-service education must be made available to all persons who plan to use the selection criteria developed in this study.

**Recommendations**

Certain recommendations can be made by this writer on the basis of this study.

1. The selection criteria, as developed in this dissertation, should be presented to the state-wide Trade and Industrial Supervisor's Conference. One of the major topics of last year's meeting was the selecting of students for Trade and Industrial Education Programs. This selection criteria should be present to those educators that will be using it in the future.

2. The selection criteria should be placed into operation in a select number of school districts and joint vocational school districts during the next school year. This is necessary in order to prove the
worth of the selection criteria produced in this study.

3. The Vocational Planning Center should be involved with the administering and the scoring of the General Aptitude Test Battery (GATB) to all ninth grade students. The school counselor could better use his time working with the results of the GATB, rather than using his time in the administering and the scoring of the test.

4. The State Department of Education, Division of Guidance and Testing should be notified that more secondary counselors in Ohio need to be trained in the interpretation of the GATB.

5. There must be better communications between the counselors and the instructors concerning Trade and Industrial Education Programs in the local schools. There is a definite need for in-service education.

6. A follow-up study of the graduates, who were selected by means of the selection criteria, must be conducted and the results compared to the other methods of selection that have been used in the past.

The real concern of this dissertation has centered on how we can effectively assist students having a wide-range of characteristics to select the program that is within their capabilities and then help them to progress where they can take their place as contributing members of our society. This writer feels this real concern can be met.

This dissertation is now completed, but the real project is now ahead, that of using these selection criteria to provide a vital service to those students, throughout Ohio, who are desirous of entering a Trade and Industrial Education Program.
APPENDIX A

An alphabetical listing of the school districts and joint vocational school districts that participated in this study are presented here along with the name of the person reporting for the school district and the number of programs they offer.
<table>
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<td>728 Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleveland Public Schools</td>
<td>1380 East Sixth Street</td>
<td>James Vecchio Supervisor</td>
<td>26</td>
<td>2,000</td>
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<tr>
<td>Cleveland, Ohio 44115</td>
<td></td>
<td>2,000 Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columbus Public Schools</td>
<td>270 East State Street</td>
<td>James Jenks, Supervisor</td>
<td>33</td>
<td>579</td>
</tr>
<tr>
<td>Columbus, Ohio 43215</td>
<td></td>
<td>579 Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuyahoga Falls Schools</td>
<td>2300 Fourth Street</td>
<td>W. Anderson, Director</td>
<td>6</td>
<td>295</td>
</tr>
<tr>
<td>Cuyahoga Falls, Ohio</td>
<td></td>
<td>295 Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dayton Public Schools</td>
<td>348 West First Street</td>
<td>R. G. Mannier, Supervisor</td>
<td>11</td>
<td>385</td>
</tr>
<tr>
<td>Dayton, Ohio 45402</td>
<td></td>
<td>385 Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elyria City Schools</td>
<td>Sixth and Middle Avenue</td>
<td>Thomas Pruski, Director</td>
<td>12</td>
<td>348</td>
</tr>
<tr>
<td>Elyria, Ohio 44305</td>
<td></td>
<td>348 Students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Findlay City Schools
1001 Blanchard Avenue
Findlay, Ohio 45840
J. Bromback, Director
11 Programs
180 Students

Hamilton City Schools
332 Dayton Street
Hamilton, Ohio 45011
Robert Judd, Supervisor
18 Programs
340 Students

Heath City Schools
30 Custer Road
Heath, Ohio 43055
S. N. Guckenheimer, Vocational Director
5 Programs
165 Students

Lima City Schools
515 South Calumet Avenue
Lima, Ohio 45804
Vaughn Coats, Vocational Director
7 Programs
197 Students

Mad River Township
801 Harshman Road
Dayton, Ohio 45431
Samuel Lane, Director
6 Programs
200 Students

Maple Heights City
5500 Clemot Drive
Maple Heights, Ohio
Icle Davis, Director
7 Programs
275 Students

Mansfield City Schools
272 West Sixth Street
Mansfield, Ohio 44902
J. P. O'Brien, Vocational Director
9 Programs
432 Students

Marion City Schools
420 Seminole
Marion, Ohio
Malcom Wright, Supervisor
5 Programs
175 Students

Massillon City Schools
128 South Avenue, S.E.
Massillon, Ohio 44646
Lowell Shrider, Director
6 Programs
237 Students

Mayfield City School District
1123 South Center Road
Cleveland, Ohio 44124
James Carroll, Director
5 Programs
115 Students

Middletown City Schools
1515 Girard Avenue
Middletown, Ohio 45042
Richard W. Lail, Coordinator
10 Programs
300 Students

Morgan Local School
Box 598
McConnelsville, Ohio 43756
Howard Parsons, Supervisor
5 Programs
175 Students

New Philadelphia City Schools
336 Third Street, N.W.
New Philadelphia, Ohio 44663
Louis Mikula, Director
6 Programs
120 Students
<table>
<thead>
<tr>
<th>School District</th>
<th>Address</th>
<th>Vocational Leadership</th>
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</thead>
<tbody>
<tr>
<td>Northwest Local Schools</td>
<td>8801 Cheviot Road</td>
<td>Eugene Hust, Vocational Counselor</td>
</tr>
<tr>
<td></td>
<td>Cincinnati, Ohio 45239</td>
<td>7 Programs</td>
</tr>
<tr>
<td>Parma City Schools</td>
<td>6726 Ridge Road</td>
<td>William Kuttler, Coordinator</td>
</tr>
<tr>
<td></td>
<td>Parma, Ohio 44129</td>
<td>11 Programs</td>
</tr>
<tr>
<td>Plain Local Schools</td>
<td>901 44th Street, N.W. Canton</td>
<td>Richard Dickes, Supervisor</td>
</tr>
<tr>
<td></td>
<td>Canton, Ohio 44709</td>
<td>13 Programs</td>
</tr>
<tr>
<td>Sandusky City School</td>
<td>407 Decatur Street</td>
<td>Al Behrendsen, Supervisor</td>
</tr>
<tr>
<td></td>
<td>Sandusky, Ohio 44870</td>
<td>8 Programs</td>
</tr>
<tr>
<td>Southwestern City Schools</td>
<td>3850 Haughtn Road</td>
<td>John E. Noecker, Vocational Guidance</td>
</tr>
<tr>
<td></td>
<td>Grove City, Ohio 43173</td>
<td>8 Programs</td>
</tr>
<tr>
<td>Sylvania City Schools</td>
<td>6801 Maplewood Avenue</td>
<td>Ross Graugs, Director</td>
</tr>
<tr>
<td></td>
<td>Sylvania, Ohio 43560</td>
<td>8 Programs</td>
</tr>
<tr>
<td>Toledo City School District</td>
<td>Manhattan and Elm</td>
<td>R. T. Scherer, Director</td>
</tr>
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<td>Toledo, Ohio</td>
<td>20 Programs</td>
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<td></td>
<td></td>
<td>1,641 Students</td>
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<td>Wadsworth City Schools</td>
<td>360 College Street</td>
<td>Martin Cramp, Supervisor</td>
</tr>
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<td></td>
<td>Wadsworth, Ohio</td>
<td>10 Programs</td>
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<td></td>
<td></td>
<td>179 Students</td>
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<tr>
<td>Warren City Schools</td>
<td>261 Monroe Street</td>
<td>Jack Derr, Supervisor</td>
</tr>
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<td></td>
<td>Warren, Ohio 44482</td>
<td>11 Programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>350 Students</td>
</tr>
<tr>
<td>Washington Local Schools</td>
<td>5602 Douglas</td>
<td>Wayne Davis, Vocational Guidance</td>
</tr>
<tr>
<td></td>
<td>Toledo, Ohio 43613</td>
<td>7 Programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 Students</td>
</tr>
<tr>
<td>West Clermont</td>
<td>Box 177</td>
<td>M. H. Zeter, Director</td>
</tr>
<tr>
<td></td>
<td>Amelia, Ohio 45102</td>
<td>13 Programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>275 Students</td>
</tr>
<tr>
<td>Youngstown City Schools</td>
<td>20 West Wood Street</td>
<td>Edward Costello, Coordinator</td>
</tr>
<tr>
<td></td>
<td>Youngstown, Ohio 44503</td>
<td>22 Programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>670 Students</td>
</tr>
<tr>
<td>Eastland Vocational Center</td>
<td>4465 South Hamilton Road</td>
<td>John Irvine, Supervisor</td>
</tr>
<tr>
<td></td>
<td>Groveport, Ohio 43125</td>
<td>25 Programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>425 Students</td>
</tr>
<tr>
<td>School Name</td>
<td>Address</td>
<td>Supervisor or Director</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Ehove Joint Vocational School</td>
<td>Box 250 Mason Road</td>
<td>Leo A. Boron, Supervisor</td>
</tr>
<tr>
<td>Four County Joint Vocational School</td>
<td>Route No. 1, Box 245-A</td>
<td>Robert Waldbauer, Supervisor</td>
</tr>
<tr>
<td>Hamilton County Joint Vocational</td>
<td>3254 East Kemper Road</td>
<td>E. C. Wiseman, Director</td>
</tr>
<tr>
<td>Knox County Joint Vocational School</td>
<td>306 Martinsburg Road</td>
<td>Bernard Nirode, Director</td>
</tr>
<tr>
<td>Lake County Joint Vocational School</td>
<td>8140 Auburn Road</td>
<td>James Jacobs, Supervisor</td>
</tr>
<tr>
<td>Lorain County Joint Vocational</td>
<td>Route No. 1</td>
<td>William E. Ruth, Director</td>
</tr>
<tr>
<td>Mahoning County Joint Vocational</td>
<td>111 South Broad Street</td>
<td>Edward V. Wolski, Supervisor</td>
</tr>
<tr>
<td>Montgomery County Joint Vocational</td>
<td>6800 Hoke Road</td>
<td>David M. Quick, Supervisor</td>
</tr>
<tr>
<td>Muskingum Area Joint Vocational</td>
<td>400 Richards Road</td>
<td>Robert Putman, Supervisor</td>
</tr>
<tr>
<td>Penta County Joint Vocational</td>
<td>Oregon Road</td>
<td>Gerald Bryant, Supervisor</td>
</tr>
<tr>
<td>Pike County Joint Vocational School</td>
<td>P. O. Box 577</td>
<td>Lindsay Ratliff, Supervisor</td>
</tr>
<tr>
<td>Pioneer Joint Vocational School</td>
<td>P. O. Box 309</td>
<td>John Furrer, Supervisor</td>
</tr>
<tr>
<td>Tri-County Joint Vocational School</td>
<td>Route No. 1</td>
<td>Mrs. Roma Preman, Counselor</td>
</tr>
<tr>
<td>School Name</td>
<td>Contact Details</td>
<td>Programs</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Vanguard Joint Vocational Center</td>
<td>Earl Knoll, Supervisor</td>
<td>19</td>
</tr>
<tr>
<td>1306 Cedar Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fremont, Ohio 43420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington County Joint Vocational School</td>
<td>David Rose, Director</td>
<td></td>
</tr>
<tr>
<td>217 Second Street</td>
<td>Opens in September, 1972</td>
<td></td>
</tr>
<tr>
<td>Marietta, Ohio 45750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayne County Joint Vocational School</td>
<td>Leland Fundom, Supervisor</td>
<td>11</td>
</tr>
<tr>
<td>Box 378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smithville, Ohio 44677</td>
<td></td>
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</tbody>
</table>
APPENDIX B

The following biographical data sheets show the panel of professional experts who evaluated the proposed selection criteria of this dissertation. The biographical data sheets are arranged in alphabetical order.
Name: Jack L. Baker

Current Position: Occupational Work Experience Coordinator

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
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</thead>
<tbody>
<tr>
<td>Wilmington College</td>
<td>B.S.</td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>M.A.</td>
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</tbody>
</table>

Major field of Study:

- Undergraduate: Industrial Education
- Graduate: Industrial Arts

Previous training or experience in areas related to vocational education:

- 8 years teaching metal in junior high school
- 3 years teaching vocational drafting in senior high school
- 3 years teaching adult education drafting classes
- Summer teaching at The Ohio State University, Industrial Arts for elementary school teachers

Miscellaneous: In his present position as an Occupational Work Experience Coordinator, Mr. Baker is in full charge of his classes in school and on the job. He instructs the students in knowledge they will need in the world of work. Attitudes, dress, grooming, money management, and other related areas are part of his program.
Name: Christopher C. Clark  
Current Position: Guidance Counselor, Westerville High School  

<table>
<thead>
<tr>
<th>Education:</th>
<th>Institution</th>
<th>Degree</th>
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<tr>
<td></td>
<td>Dennison University</td>
<td>B.A.</td>
</tr>
<tr>
<td></td>
<td>The Ohio State University</td>
<td>M.A.</td>
</tr>
</tbody>
</table>

Major field of Study:  
Undergraduate: Mathematics  
Graduate: Guidance and Counseling  

Previous Training or experience in areas related to vocational education:  
- 1 year mathematics teacher in junior high  
- 3 years teaching mathematics in senior high school  
- 3 years in the United States Air Force, Captain  
- 3 years counseling in senior high school.  

Miscellaneous: Mr. Clark has served in both inner city schools and outer city schools in the area of selecting students for vocational education programs. He has served in four different school systems.
Name: Richard E. Green

Current Position: Field Supervisor, Division of Guidance and Testing

Education:  

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>B.S.</td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>M.A.</td>
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</table>

Major field of Study:

Undergraduate: Music Education
Graduate: Guidance and Counseling

Previous Training or experience in areas related to vocational education:

Restaurant Manager
Radio Operator
Vocational Guidance Counselor
Vocational Guidance Coordinator, State Department of Education, Division of Guidance and Testing.

Miscellaneous: In his present position, Mr. Green travels throughout the State of Ohio conducting workshops for counselors in the administration of the General Aptitude Test Battery and the Ohio Vocational Interest Survey.
Name: John J. Hromadik

Current Position: Manpower Development Training Counselor

<table>
<thead>
<tr>
<th>Education</th>
<th>Institution</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duquesne University</td>
<td>B.Ed.</td>
<td></td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>M.A.</td>
<td></td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>(Doctoral Candidate)</td>
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</tr>
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</table>

Major field of Study:
- Undergraduate: Social Studies
- Graduate: Guidance and Counseling

Guidance, Adult Education, and Vocational Education

Previous Training or experience in areas related to vocational education:
- 3 years Ohio State Employment Service, Counselor
- 1 year Area Counselor, Ohio State Employment Service
- 1 year Ohio State Employment Service State Supervisor
- 1 year Supervisor, Vocational Planning Center

Miscellaneous: In his present position, Mr. Hromadik provides guidance and counseling services to the students in the Columbus Manpower Training Center.
Name: James R. Jenks

Current Position: Supervisor, Trades and Industrial Education

---

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>B.S.</td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>M. Ed.</td>
</tr>
</tbody>
</table>

Major field of Study:

- Undergraduate: Industrial Education
- Graduate: Industrial Education

Previous Training or experience in areas related to vocational education:

20 years experience in senior high schools teaching machine trades and building trades. Experience teaching in adult apprenticeship programs in carpentry. Occupational Work Experience Coordinator at the senior high school level.

Miscellaneous: In his present position, Mr. Jenks works closely with all Trade and Industrial Instructors in his school system. Such items as supplies and equipment, in-service education, placement and screening of students and filling out state reports are now part of his job description.
Name:  Ron Jones


Education:  

<table>
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<th>Institution</th>
<th>Degree</th>
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<tbody>
<tr>
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<td>B.S.</td>
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<tr>
<td>Xavier University</td>
<td>M.Ed.</td>
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</table>

Major field of Study:

Undergraduate:  Physical Education and Health

Graduate:  Guidance and Administration

Previous Training or experience in areas related to vocational education:

2 years as Principal at Piketon Vocational High School. Head Football Coach for 7 years, Athletic Director 6 years, head Baseball Coach 5 years, all in high school. 2 years as a school counselor.

Miscellaneous:  In his present duties Mr. Jones is directly in charge of all the vocational Guidance activities in the Westerville Schools.
Name: Donald L. Karr

Current Position: Instructor, College of Education, Academic Faculty for Vocational and Technical Education, The Ohio State University

<table>
<thead>
<tr>
<th>Education</th>
<th>Institution</th>
<th>Degree</th>
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<tbody>
<tr>
<td></td>
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<td></td>
<td>University of Cincinnati</td>
<td>M.Ed.</td>
</tr>
<tr>
<td></td>
<td>The Ohio State University</td>
<td>Ph.D.</td>
</tr>
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</table>

Major field of Study:

Undergraduate: Education

Graduate: Trade and Industrial Education

Previous Training or experience in areas related to vocational education:

5 years Automotive Mechanics Instructor

2 years Supervisor of Trade and Industrial Education

6 years Instructor at The Ohio State University

Miscellaneous: Dr. Karr has been associated with in-service education training for instructors in the Practical Nurses Program.
Name: George C. Kosbab

Current Position: State Supervisor, Evaluation Programs Research, Survey, Evaluation and Exemplary, Division of Vocational Education, State Department of Education

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
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</tr>
<tr>
<td>The Ohio State University</td>
<td>M.A.</td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>(Doctoral Candidate)</td>
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</tbody>
</table>

Major field of Study:

Undergraduate: Industrial Arts
Graduate: Trade and Industrial Education

Previous Training or experience in areas related to vocational education:
4 years teaching Industrial Arts in junior high school.
6 years as Consultant in Testing and Research in Trade and Industrial Education.

Miscellaneous: Developed the Trade and Industrial Tests and other curriculum materials. Co-authored the Plumbers Test, United States Armed Forces Institute. Co-authored manual for Plasters Union test. Currently coordinating a vehicle for a state wide evaluation program in vocational education known as PRIDE.
Name:  William A. Mustaine
Current Position:  School Counselor, North High School

Education:  
Institution                                Degree
Ohio University                           B.S.
University of Toledo                      M. Ed.

Major field of Study:
Undergraduate:  Commerce
Graduate:  Guidance and Counseling

Previous Training or experience in areas related to vocational education:
3 years teaching in junior and senior high school
4 years vocational counseling in senior high school
Personnel Research, Western Electric
Supervisor, Headstart Program
Lucas County, Child Welfare Department

Miscellaneous:  In his present position as a vocational counselor, Mr. Mustaine is responsible with developing the interest of the students in his school towards vocational education programs. Mr. Mustaine submits the student application to the central office for a vocational program. He does not screen out any students, but submits all applications.
Name:  Richard M. Curbait

Current Position:  Instructor, University of Cincinnati

Education:  

<table>
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<th>Degree</th>
</tr>
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<tbody>
<tr>
<td>Butler University</td>
<td>A.B.</td>
</tr>
<tr>
<td>Indiana University</td>
<td>M.S.</td>
</tr>
<tr>
<td>University of Cincinnati</td>
<td>(Doctoral Candidate)</td>
</tr>
</tbody>
</table>

Major field of Study:

Undergraduate:  Liberal Arts

Graduate:  Vocational Education

Previous Training or experience in areas related to vocational education:

12 years in industry, Machinist and Tool Maker

2½ years Machine Shop, high school

3½ years Purdue University, teaching Machine Tools

1 year teaching, Ohio College, Applied Science

2 years Dean, Evening College, Ohio Mechanical Institution

7 years teacher education, University of Cincinnati

Miscellaneous:
Name: Frank E. Reynolds

Current Position: Instructor at the University of Cincinnati

Education:  
Institution                      Degree
The Ohio State University       B.S.
The Ohio State University       M.S.
University of Cincinnati        (Doctoral Candidate)

Major field of Study:
Undergraduate: Industrial Education  
Graduate: Special Education

Previous Training or experience in areas related to vocational education:
High school teacher in Industrial Arts and Occupational Work Experience  
2 years on the faculty at the University of Cincinnati.
Field representative to the Manpower Development Training Programs.
20 years, Military Personnel, rank of Major

Miscellaneous: At the University of Cincinnati, Mr. Reynolds teaches  
classes, is the field representative to the Manpower Development Training
Programs, is writing his dissertation, and finds time to be president of
the Ohio National Guard. His Ph.D. is in the areas of Vocational
Education and Special Education.
Name: Michael D. Sheets

Current Position: Outstation Counseling Supervisor, Vocational Planning Center

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
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</thead>
<tbody>
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<td>Transylvania College</td>
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Major field of Study:

<table>
<thead>
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<th>Undergraduate:</th>
<th>Vocational Counseling</th>
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</thead>
<tbody>
<tr>
<td>Industrial Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Previous Training or experience in areas related to vocational education:

- 3 years counseling, Ohio State Employment Service
- 1 year counseling, Youth Opportunity Center
- 3 years counseling, Vocational Planning Center

Miscellaneous: Mr. Sheets present duties involve supervising eight vocational counselors and two interviewers that are placed in community action agencies. He is also concerned with placement, testing, and counseling services for the disadvantaged. Mr. Sheets works with the screening for Manpower Development Training Programs; conducting group guidance at Training Institution of Central Ohio; and works with outstation counselors.
Name: David Stewart

Current Position: Assistant Principal, Central High School

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>B.S.</td>
</tr>
<tr>
<td>Xavier University</td>
<td>M.Ed.</td>
</tr>
</tbody>
</table>

Major field of Study:

Undergraduate: Industrial Education

Graduate: Secondary Education

Previous Training or experience in areas related to vocational education:

6 years teaching Woodworking in high school

6 years teaching Power Mechanics in high school

5 years in motion picture phoyography

Instructed programs in Machine Shop, Drafting, and Automotive Mechanics. (adults)

Miscellaneous: Co-authored "Industrial Arts Curriculum Guide for Power Mechanics in Ohio Schools", State Board of Education, January, 1968. In his present position, Mr. Stewart is the administrator in charge of the Occupational and Vocational Programs at Central High School. He is directly responsible for administering the programs, selecting the students, discipline, attendance, and developing new programs based on the needs of the students.
APPENDIX C

Letters of Transmittal
Dear Colleague:

Our staff is now in the process of developing new selection criteria for students seeking admission to our Trade and Industrial education programs.

As a result of the supervisors meeting this past summer, we realize that many excellent selection procedures are now being used throughout our state.

We would like to obtain a copy of your school's selection procedures for Trade and Industrial education program. After a careful view of all the documents, we feel we can develop an ideal procedure — based on your ideas and experience.

If you would please fill out the enclosed questionnaire and return it in the self-addressed envelope, we would greatly appreciate it.

Sincerely,

Richard W. Beck, Supervisor
Vocational and Career Supervisor

RWB/amo
Encl.
TRADE AND INDUSTRIAL EDUCATION QUESTIONNAIRE

1. Name of Your School District _________________________________________

2. Address of Your School District ______________________________________

3. Person Filling out this Questionnaire _________________________________

   Title_________________________________

4. Number of Trade and Industrial Programs You Offer _____________________

5. Number of Trade and Industrial Students ______________________________

How are students selected for your Trade and Industrial Education Programs? (If you have the selection procedures printed, please send me a copy. If the procedures are not printed, would you describe the procedures below).
APPENDIX D

The following are examples of Student Applications and Profile sheets for three programs in Trade and Industrial Education.
Name ________________________________

Last _______ First _______ Middle ______

Address ______________________________

Number _______ Street _______ Zip ______

Home Phone ______________________________

Interview by Counselor ____________________

Ninth Grade Courses

Subjects   Credits      Subjects   Credits
1. ___________ 1. ___________
2. ___________ 2. ___________
3. ___________ 3. ___________
4. ___________ 4. ___________
5. ___________ 5. ___________
6. ___________ 6. ___________
7. ___________ 7. ___________

Home High
School ____________________

Date of
Birth ____________________

Type Program You Are
Now Enrolled
(Circle One) Honor
Regular
Modified
Special
Other

Grade 9 Grande 10

Days Absent _____ _____
Days Tardy _____ _____

(Explain any Lengthy
Absences on Back of This
Form).

Interview by
Instructor ___________

General Aptitude Test Battery

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Projected
Success In
Drafting

[ ] X

Indicate Student's Score

By 0

Student Application and Profile for Drafting
Name ____________________________

Last First Middle

Address ____________________________________________

Number Street Zip

Home Phone ________________________________

'Interview by Counselor ____________________

Ninth Grade Courses

Subjects Credits Subjects Credits
1. ___________ 1. ___________
2. ___________ 2. ___________
3. ___________ 3. ___________
4. ___________ 4. ___________
5. ___________ 5. ___________
6. ___________ 6. ___________
7. ___________ 7. ___________

General Aptitude Test Battery

D.O.T. G V N S P Q K F M

1. 
2. X X X
3. X X X X
4. X
5. 

Projected Success in Machine Trades

Indicate Student's Scores

By

Student Application and Profile for Machine Trades
Name ____________________________
Last ____________________________
First ____________________________
Middle ____________________________

Address ____________________________
Number ____________________________
Street ____________________________
Zip ____________________________

Home Phone ____________________________

Interview by Counselor ____________________________

Ninth Grade Courses

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Home High School ____________________________

Date of Birth ____________________________

Type Program You Are Now Enrolled (Circle One) Honor
Regular
Modified
Special
Other

Grade 9 ____________________________
Grade 10 ____________________________

Days Absent _______ ____________________________
Days Tardy _______ ____________________________

(Explain any Lengthy Absences on Back of This Form).

Interview by Instructor ____________________________

Projected Success In Welding

Indicate Student's Scores

General Aptitude Test Battery

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Student Application and Profile for Welding
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