1980

An Evaluation of the Masters Program in Industrial Arts Education at Old Dominion University 1974-1979

Michael L. Davenport
Old Dominion University

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AN EVALUATION OF THE
MASTERS PROGRAM
IN
INDUSTRIAL ARTS EDUCATION
AT
OLD DOMINION UNIVERSITY
1974 – 1979

A Research Paper
Presented to
The Faculty of the School of Education
Old Dominion University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science in Education

by
Michael L. Davenport
May 1980
This research paper was prepared by Michael L. Davenport under the direction of his advisor and instructor in Problems in Education VIAE 636. It is submitted to the Graduate Program Director for Industrial Arts Education in partial fulfillment of the requirements for the Degree of Master of Science in Secondary Education.

Date: 11-25-80

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CHAPTER 1
INTRODUCTION

The definition of evaluating, as defined in Webster's Dictionary, is to examine and judge concerning the worth, quality, significance, amount, degree, or conditions of that which is measured.¹ This paper focuses on evaluation and may prove beneficial in determining if the Masters Program in Industrial Arts Education at Old Dominion University has met the overall curriculum objectives as stated in the definition of evaluation. The diagnosis of the program's strengths and weaknesses may enhance the program and help establish strategies to improve the overall effectiveness of the curriculum.

STATEMENT OF PROBLEM

This study sought to determine the effectiveness of the Masters Degree Program in Industrial Arts Education at Old Dominion University, Norfolk, Virginia. Through the evaluation of returned questionnaires completed by past graduates of the program, this research study will help to ensure that the program makes a high quality contribution to the student, the community, and society. The collection of data needed to improve the effectiveness and efficiency of personnel, facilities, equipment, policies, programs, and procedures will also be computed and weighed upon its' merits.

RESEARCH GOALS

The purpose of this study was accomplished for two basic reasons:

(1) To determine the degree to which the Industrial Arts Education

program achieved its objectives.

(2) To collect data needed to improve the overall effectiveness and efficiency of the Masters Program in Industrial Arts Education.

BACKGROUND AND SIGNIFICANCE

This research study was the result of data collected from a comprehensive questionnaire. The findings were computed from the responses made by the graduates of the Masters Program in Industrial Arts Education at Old Dominion University. The results of this study were based upon the opinions of those graduates and their sincere interest in helping to instill recognition and improvement in the curriculum objectives of the program.

The Masters Degree Program in Industrial Arts Education began in the Fall semester of 1974. Since it is customary to evaluate a program upon reaching its fifth anniversary, this transactional instrument was devised to explore those concerns shared by a majority of the graduates from the program.

It is the responsibility of institutions to serve the demands and needs of its students and social environment. "The institutions must be responsive if they are to contribute to the quality of individual lives. In turn, the institution needs to make demands on those individuals in order to insure the individual's objectives are met."\(^2\)

In any group or institution, resources need to be committed to maintaining negotiations across the transactional gap between individuals and institutions."\(^3\) It is the objective of this research study to assist


\(^3\)Ibid, p. 8.
in bridging this gap and thereby "helping to identify the needs which are often felt but seldom admitted because of their implication of personal weakness."  

"The most negative criticism that educators make is that educational programs fail to meet their objectives."  

This idea is usually supported with vast amounts of documentation specifically slanted in pointing out failure. It is the objective of this research study to identify the programs' strengths as well as its weaknesses, thereby attempting to provide the staff with the information necessary in seeking a utopian graduate program.

LIMITATIONS OF THE STUDY

This study was limited solely to solicitation if inputs by graduates of the Masters Degree in Industrial Arts Education program at Old Dominion University. The time frame was based on the graduates since the beginning of the program which covers a period of five years.

The intent of the questionnaire was designed to gather information that is relevant only to the Masters Program in Industrial Arts Education at Old Dominion University. The findings were documented and presented to the program staff as an optimistic approach to development and improvement in the curriculum.

BASIC ASSUMPTIONS

It was assumed in this study that the following basic principles of evaluation were adhered to when filling out the questionnaire:

1. The information entered on the questionnaire was relevant to the educational program in advance studies.

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2. The solicitors filled out the questionnaire objectively.

3. The evaluation was inclusive of those characteristics of the Masters Program.

4. The evaluation dealt with the strengths and weaknesses of the program. It did not deal with vague generalities.

PROCEDURES FOR TREATING DATA

The data was collected through a survey and evaluated, resulting in the identification of strengths and weaknesses in the Masters Program. The results of this evaluation were submitted to the staff for their review and consideration.

PROCEDURES FOR COLLECTING DATA

A questionnaire was sent out to all of the previous graduates of the Master's Degree Program in Industrial Arts Education Program at Old Dominion University, Norfolk, Virginia. The recipients of the survey were requested to complete the forms and return them immediately in the preaddressed stamped envelope.

DEFINITION OF TERMS

The following terms were used in this study:

1. Masters Program: Refers to the Masters Degree Program in Industrial Arts Education at Old Dominion University, Norfolk, Virginia.

2. Evaluation: The examination and judgment concerning the worth, quality, and significance of the Advanced Studies program in Industrial Arts Education at Old Dominion University, Norfolk, Virginia.

3. Questionnaire: A survey comprised of questions that generated
data to be collectively evaluated in hopes of suggesting improvements in the Masters Program.

SUMMARY

This chapter points out the need for identifying strengths and weaknesses in the Masters Program in Industrial Arts Education at Old Dominion University. It defines the need for the research study and its intended purpose. Basic assumptions and limitations were cited as well as procedures for collecting and treating the data.

Chapter two will establish the need for evaluation of the Masters Program in Industrial Arts Education. This will be titled the Review of Literature.

Chapter three will be titled the Methods and Procedures. Its purpose will be to outline the procedure for collecting the data.

Chapter four will be titled Findings of the Study. It will be designed for documenting the results of the questionnaire.

Chapter five, entitled Summary, Conclusions, and Recommendations, will be the final chapter in this research paper. Its purpose will be to summarize the research findings, elicit conclusions derived from these findings, and provide recommendations for program improvements.
CHAPTER II
REVIEW OF LITERATURE

The objective of this research study was to evaluate the Masters Program in Industrial Arts Education at Old Dominion University. Previous investigation by the researcher revealed that no evaluation of the program was performed since its outset. This was primarily because it was a relatively new program within the department. The following information was provided to support the need for an evaluation process that accounts for program strengths and weaknesses from the perspective of those who are affected by it.

The steadily rising enrollments in the colleges and universities provide evidence that a portion of the population place high value on formal education beyond that required by law. It may be ascertained that this increase in enrollment expresses a demand for higher education. Those same individuals are also concerned about the quality of education of these institutions. As Galen Saylor points out

"judgements about the quality of education must be rendered in terms of how well the school is developing the respective set of talents, capabilities, and potentialities of each student."

To determine the quality of educational programs, one must establish a specific set of standards and hold the institutions accountable in achieving them.

The idea of accountability in higher education means that colleges and universities are responsible for conducting their affairs so that the outcomes are worth the cost, and that their efforts are directed

toward appropriate goals with consistent outcomes. In addition, it further implies that institutions should be held accountable for reporting evidence on the degree to which it has achieved its mission. This has been accomplished through evaluation devices specifically designed in measuring educational excellence.

The term "evaluation" means to determine the worth of something. In education, the evaluation process is a procedure for judging the worth of a program, product, procedure, or objective designed to attain specified goals. This process is continuous and involves procedures that are both formative and summative.

A crucial aspect of a sound evaluation system is the identification of its intended purpose. "The most adequate evaluation systems assume the existence of:

A. A well defined philosophy,
B. Clear-cut goals and objectives,
C. A specified curriculum model,
D. A systematic evaluation design, and
E. Communications channels through which the results are made clear to school staff and the public."

Despite the substantial commitment to formal learning, very little is known about what represents excellence in education. At the graduate level, rather fine distinctions among departments and institutions are made, however the determinants of quality in a graduate academic program remain elusive.

"What causes some graduate programs to be highly regarded while others, perhaps at seemingly comparable institutions, are not so well received? What characteristics exist among graduate programs and their supporting institutions to cause some to be judged superior to others? There is no agreed upon method for determining the quality of graduate

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institutions, however, it seems that informal opinion remains the only widely accepted basis for judging the relative merits of these institutions.\footnote{Morgan, David R. and Kearney, Richard C. and Regens, James L., "Assessing Quality Among Graduate Institutions of Higher Education in the United States," Social Science Quarterly, (December 1976), 57, No. 3: p. 670.}

On the contrary, Eva L. Baker points out, formulative evaluation programs have reached new heights in the field of education. When one is trying to develop an instructional innovation or adapting an existing program, data should be collected, analyzed, and interpreted with the intent of improving the program.\footnote{Baker, Eva L., Evaluating Educational Programs and Products, Englewood Cliffs, J. J.: Educational Technology Publications, 1974, p. 56.} William Georgiades points out that "the primary purpose for collecting evaluative data is to support diagnostic and prescriptive actions which will assist the individual student in his growth; to aid a school in comparing itself with where it was yesterday, where it is today, and where it may be in the future; and to provide the public with evidence of the kinds of growth and the directions of growth which are occurring as students enroll in a school's various programs."\footnote{Georgiades, William, How Good Is Your School, NASSP, 1978, Reston, Virginia, p. 4.}

One might ask, should educational theory and practice be synonymous? The answer to this question may lie in the real value of an experience that varies with consequences and outcomes. "The more useful the outcome, the more valuable the experience, therefore, the value of a program outcome must also vary according to a person's experiences related to the program. The value of program outcomes and the value of program experiences are interdependent." This may be interpreted to mean, that all people will place individualized values on educational programs based on their experiences and expectation of that program. Therefore, the way people evaluate a program will vary infinitely. A program will consist of many
values and the concept of evaluation must be broad enough to encompass them. It must allow students to determine the value of the program's experiences and outcomes as they perceive them. However, Terrel Bell points out,

"On the college level the important information about the performance of the institution contained in the combined wisdom of thousands of graduates is often largely ignored. In a needs assessment program, surveys of persons having had an opportunity to reflect upon the value of college studies should be utilized for the great potential that exists for decision-making and priority-setting purposes." 8

The problem, in an evaluation process, is to determine how "to assess the academic merits of an innovative graduate program, which is designed to teach students the importance of critical thinking skills and social science concepts." When new programs are introduced, they should provide better educational results, thus justifying themselves according to their educational objectives and outcomes. When establishing educational goals, one should ask "what was unique about those objectives?" In addition, "how should one attempt to convince the college or university and public that a new program will provide an educational service?" The evaluation process should provide a set of objectives that are meaningful and not merely a ritual exercise for the novice educator. Once these objectives are formulated, then one can determine the evaluative device best suited to measure these educational objectives.9

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"Other points of view exist, however the shared opinion is that accountability, educator control, and formal evaluation has led to the almost universal use of educational objectives as the basis for program evaluation."\textsuperscript{10}

As a result of public insistence, the evaluation process is used to determine the value of a program and establishes accountability for educational curriculums. However, as Daniel B. Conable cautions "educators who are persistent in trying to account for learning rather than inviting public questioning of the matter and style of their instruction render a great disservice, both to the institutions and to the people who use them."\textsuperscript{11} The evaluation process rendering the most objective criticism will come from the graduates of these programs. In the educational market place, the graduate is seeking knowledge and skills essential to meet his needs. Therefore, the graduate is the consumer of educational services. He not only invests his money, he spends extensive time and energy in pursuing an education. It should be assumed that the graduate, like an investor, expects a return in the form of productive employment, social development, and personal satisfaction.\textsuperscript{12}

This is not a completely comprehensive survey of all the pertinent literature available to this study. However, it is representative of those knowledgable in the field of education. The generalizations did not account for a specific evaluative device, but the general consensus indicates a need for curriculum evaluation by its graduates.


In conclusion, the review of literature examined the definition of evaluation and the need for evaluating the Masters Program in Industrial Arts Education.

Chapter three deals with the methods and procedures in developing the survey and processing the results.
CHAPTER III

METHODS AND PROCEDURES

The purpose of descriptive research is "to describe systematically the facts and characteristics of a given population or area of interest, factually and accurately".\(^1\) Using a questionnaire, the researcher accumulated the data base used in evaluating the Industrial Arts Education Graduate Program at Old Dominion University. This chapter outlines the methods and procedures used to facilitate the completion of this project.

POPULATION

The population in this study consisted of twenty-seven graduates who had received a Master of Science Degree in Education with a program of studies in Industrial Arts Education from Old Dominion University from 1974 to December, 1979. As recent graduates of the program, they were best suited to evaluate and make recommendations as to its effectiveness in preparing them for their current positions. The list of graduates who participated in this survey were acquired from Old Dominion University's Department of Industrial Arts Education and can be found in Appendix A of this study.

INSTRUMENT DEVELOPMENT

The survey instrument was a modified questionnaire originally developed by Gordon Loeffler and addressed to graduates who received a Master of Science Degree in Industrial Education from the University of Wisconsin-Stout. Its purpose was to evaluate the effectiveness of the Vocational

and Industrial Arts Education Program in providing meaningful learning experiences.

The questionnaire was divided into three sections. The first section was designed to evaluate the graduate's attitudes toward the program. Section two allowed the graduate to evaluate the individual courses, and section three provided an opportunity for the graduate to make comments and recommendations regarding the overall program.

In order to achieve maximum participation in the survey, the Likert or summated rating scales were used for ease in answering each item in sections one and two. The respondents were instructed to encircle the response that best represented their opinion regarding each closed form statement. In section one, the letters SA represented "strongly agree", while A represented "agree", U represented "undecided", D represented "Disagree", and SD represented "strongly disagree". In section two, the letter A represented "no value", B represented "slight value", C represented "moderate value", D represented "considerable value", and E represented "great value". To eliminate confusion on the part of the participants, it was necessary to develop the items in each section as precisely and directly as possible. In order to facilitate timely analysis and tabulation of the survey results, sections one and two conformed to an objective format. A copy of the survey questionnaire is located in Appendix B.

DATA COLLECTION

To insure a timely response and create a personal atmosphere in soliciting their assistance, the survey was sent to the current home address of each participant through the United States Postal Service on April 25, 1980. To reaffirm the importance of the study and the value of the graduate's contribution to the program evaluation, a followup letter
was mailed to the nonrespondents on June 5, 1980. Copies of the initial
cover letter of transmittal and the followup letter are located in
Appendices C and D respectively.

TREATMENT OF DATA

In analyzing the results of the questionnaire, the responses to each
item in sections one and two were tabulated. Section one was primarily
divided into five areas: the participants' attitudes toward the program's
effectiveness, curriculum content, faculty-student relationships, grading
method, and practical application. Section two was designed to identify
those courses of most value in fulfilling the graduates' needs.

In order to obtain opinionated data not covered in sections one and
two, but pertinent to the overall program evaluation, section three con­
formed to an open-ended format.

The mean method was used in statistically analyzing the central
tendency for the closed form statements in sections one and two. The
results of the open form statement in section three was categorized and
analyzed for possible improvements in or alternatives to the existing
curriculum content.

SUMMARY

This chapter focused on the design and administrating of the
questionnaire. The survey results from section one and two were analyzed
to determine the strengths and weaknesses of the graduate program.
Section three provided additional suggestions and recommendations that
may aid in improving the program.

The results of the survey can be found in Chapter IV of this
research paper.
Chapter IV contains the statistical results of a survey designed to evaluate the effectiveness of the Master's Program in Industrial Arts Education at Old Dominion University.

The questionnaire was divided into three sections. Sections one and two required responses to closed form statements and were designed to evaluate the graduate's attitudes toward the program and individual courses respectively. Section three required responses to an open form statement and was designed to provide the graduate an opportunity to make comments and recommendations regarding the overall program.

On April 25, 1980, questionnaires were mailed to twenty-seven graduates of the Master's Program who received their degrees from 1974 to 1979 inclusive. As outlined in Table 1, nineteen surveys were returned, eighteen completed, and one returned with an attached note indicating an unwillingness to participate in the survey due to personal reasons.

In an effort to secure an optimum number of completed surveys, a followup letter was mailed to the eight non-respondents on June 5, 1980. As evidenced in Table 2, three additional surveys were completed and returned.

In conclusions, Table 3 represents the basis for the total findings of this study. Of the twenty-seven surveys mailed, twenty-two (81.5%) were returned with twenty-one completed.

Section one of the questionnaire required responses to twenty-five items aimed at determining the graduates' attitudes toward the Master of Science Program in Industrial Arts Education. The likert or summated rating scales were employed for ease in questionnaire design and evaluation,
**TABLE 1**

INITIAL RESPONSES TO QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Number Sent</th>
<th>Number of Responses</th>
<th>Number of Useable Responses</th>
<th>% Response to Questionnaire</th>
</tr>
</thead>
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<tr>
<td>27</td>
<td>19</td>
<td>18</td>
<td>70.4</td>
</tr>
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</table>

**TABLE 2**

RESPONSES TO QUESTIONNAIRE AFTER FOLLOW-UP LETTER

<table>
<thead>
<tr>
<th>Number Sent</th>
<th>Number of Responses</th>
<th>Number of Useable Responses</th>
<th>% Response to Questionnaire</th>
</tr>
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<tbody>
<tr>
<td>8</td>
<td>3</td>
<td>3</td>
<td>37.5</td>
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TABLE 3
TOTAL RESPONSES TO QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Number Sent</th>
<th>Number of Responses</th>
<th>Number of Useable Responses</th>
<th>% Response to Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>22</td>
<td>21</td>
<td>81.5</td>
</tr>
</tbody>
</table>
and to insure a maximum number of completed responses. Using the following response rating legend, all participants were instructed to answer each closed form item by encircling the response that best represented their opinion.

SD = Strongly Disagree  
D = Disagree  
U = Undecided  
A = Agree  
SA = Strongly Agree

When the completed surveys were returned, the data was compiled into tables for simplification in evaluating the results. Example Table 4 was provided to assist in explaining the tables and interpolating the data. Tables 5 through 9 provided the statistical data for each question in section one of the survey. The term program referred to the Master of Science Program in Industrial Arts Education.

Responses to statements one through seven indicate the graduates' attitudes concerning the graduate program as a curriculum for professional career development. The first statement: The graduate program offers a wide spectrum of courses that meet my educational needs, was generally accepted by the response "agree". This was identified by a mean of 3.762. The second statement: While employed in my present occupation, I frequently use the knowledge and skills I developed in the program, was accepted by the response "agree" with a mean of 3.667. The third statement: The Program prepared me for the type of work I perform in my current job, was received favorably by the response "agree" and a mean of 3.381. The fourth statement: The Program was structured to meet my educational needs, was accepted by the response "agree" with a mean of 3.619. The fifth statement: The Program provided interaction with other graduate students, was determined acceptable by
### TABLE 4
**Attitude Survey of Graduates from the Masters Program in Industrial Arts Education at Old Dominion University**

**Section 1 Question 1 Through 25**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>%</th>
<th>D</th>
<th>%</th>
<th>U</th>
<th>%</th>
<th>A</th>
<th>%</th>
<th>SA</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Program was structured according to my individual educational needs.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>10</td>
<td>11</td>
<td>52</td>
<td>6</td>
<td>28</td>
<td>4.000</td>
</tr>
</tbody>
</table>

**Table Key:** Item No. corresponds with survey statement number. Item represents the statement that is being addresses. Response Ratings identifies the attitudes of the respondents. SD = Strongly Disagree. D = Disagree. U = Undecided. A = Agree. SA = Strongly Agree. % following each response rating expresses the percent of total responding to each rating. Mean is the sum of the measures divided by the number of measures. A point value of 1 thru 5 is assessed to the response ratings SD, D, U, A, and SA respectively in determining the Mean.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The graduate program offers a wide spectrum of courses that meet my</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>3.762</td>
</tr>
<tr>
<td></td>
<td>educational needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>While employed in my present occupation, I frequently use the know-</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>19</td>
<td>3</td>
<td>3.667</td>
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<td></td>
<td>ledge and skills I developed in the program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3.</td>
<td>The Program prepared me for the type of work I perform in my current</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>29</td>
<td>4</td>
<td>3.381</td>
</tr>
<tr>
<td></td>
<td>job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The Program was structured to meet my educational needs.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>24</td>
<td>3</td>
<td>3.619</td>
</tr>
<tr>
<td>5.</td>
<td>The Program provided activities that encouraged interaction with</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>4.000</td>
</tr>
<tr>
<td></td>
<td>other graduate students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The Program helped me develop good oral and written communication</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>4</td>
<td>3.810</td>
</tr>
<tr>
<td></td>
<td>skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>The Program is a realistic approach toward obtaining the training I</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>33</td>
<td>5</td>
<td>3.238</td>
</tr>
<tr>
<td></td>
<td>needed for my present position.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the response "agree" with a mean of 4.000. The sixth statement: The program helped me develop good oral and written communication skills, received an acceptable response of "agree" with a mean of 3.810. The seventh statement: The program is a realistic approach toward obtaining the training I needed for my present position, received a weak response of "agree"-"undecided" and a mean of 3.238.

Responses to statements eight through fifteen indicate the graduates attitude concerning the graduate program curriculum content. Statement eight: The number of required and elective courses were appropriate for fulfilling the Program objectives, was accepted by the response "agree" and a mean 4.048. The ninth statement: The graduate level course content was current with modern theories, practices, and technologies, received an overall response of "agree" with a mean of 3.714. The tenth statement: The instruction in graduate level courses was always relevant to the course objectives, was accepted by the response "agree" with a mean of 3.905. The eleventh statement: I was always aware of the objectives and the competencies to be achieved in graduate level courses, was favorably accepted by the response "agree" and a mean of 3.952. The twelfth statement: The graduate level course instruction was usually geared toward the individual rather than the class as a whole, received a response between "agree" and "undecided" and a mean of 3.286. The thirteenth statement: Using the knowledge I acquired while in the program, I feel confident that I could develop a sound curriculum for a subject area with which I am familiar, was favorably accepted with a response between "agree" and "strongly agree" with a mean of 4.333. In addition, the fourteenth statement: The program helped me to develop a skill for evaluating, reporting, and developing research data, was favorably received with a response between "agree" and "strongly
agree" with a mean of 4.190. The fifteenth statement: The research project is an exceptionally good educational experience, received an overall response of "agree" with a mean of 3.857.

The responses to statements sixteen through nineteen reflect the graduates' attitudes concerning their faculty-student relationship. The sixteenth statement: My research advisor provided me the necessary assistance in selecting and completing my research project, received an overall response of "agree" with a mean of 4.143. The seventeenth statement: My program advisor always provided me with appropriate consultative services, was favorably received with a response between "agree" and "strongly agree" with a mean of 4.333. The eighteenth statement: My program advisor was available on an informal basis for consultations and the nineteenth statement: I was pleased with the faculty and their efforts, were equally received with a response between "agree" and "strongly agree" with a mean of 4.286.

The response to statements twenty through twenty-two represent the attitudes of the graduates concerning the grading method. The twentieth statement: I approved of the grading method used in graduate level courses was accepted by the response "agree" with a mean of 4.048. The twenty-first statement: There was appropriate time allocated for completing graduate level courses, was favorably accepted with a response between "agree" and "strongly agree" with a mean of 4.286. The twenty-second statement: The final grade I received for graduate level courses was directly proportionate to my work efforts and the knowledge I attained in those courses, was received with a response of "agree" and a mean of 4.048.

The response statements twenty-three through twenty-five indicate the graduates' attitude concerning the validity of the program regarding
### TABLE 6
ATTITUDE SURVEY OF GRADUATES FROM THE
MASTERS PROGRAM IN INDUSTRIAL ARTS EDUCATION
AT
OLD DOMINION UNIVERSITY

SECTION 1 QUESTION 8 THROUGH 15

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>The number of required and elective courses were appropriate for fulfilling the Program objectives.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>The graduate level course content was current with modern theories, practices, and technologies.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>10.</td>
<td>The instruction in graduate level courses was always relevant to the course objectives.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>I was always aware of the objectives and the competencies to be achieved in graduate level courses.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>The graduate level course instruction was usually geared toward the individual rather than the class as a whole.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>13.</td>
<td>Using the knowledge I acquired while in the program, I feel confident that I could develop a sound curriculum for a subject area with which I am familiar.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14.</td>
<td>The Program helped me to develop a skill for evaluating, reporting, and developing research data.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>The research project is an exceptional good educational experience.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
### TABLE 7
ATTITUDE SURVEY OF GRADUATES
FROM THE
MASTERS PROGRAM IN INDUSTRIAL ARTS EDUCATION
AT
OLD DOMINION UNIVERSITY

SECTION 1 QUESTION 16 THROUGH 19

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>My research advisor provided me the necessary assistance in select-</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>4.143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ing and completing my research project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>My program advisor always provided me with appropriate consultative services.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4.333</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>My program advisor was available on an informal basis for consultatio-</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>4.286</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I was pleased with the faculty and their efforts.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4.286</td>
</tr>
</tbody>
</table>

24
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>I approved of the grading method used in graduate level courses.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>14</td>
<td>0</td>
<td>11 53 7 33 4.048</td>
</tr>
<tr>
<td>21</td>
<td>There was appropriate time allocated for completing graduate level courses.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5 62 7 33 4.286</td>
</tr>
<tr>
<td>22</td>
<td>The final grade I received for graduate level courses was directly proportionate to my work efforts and the knowledge I attained in those courses.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>14 11 52 6 29 4.048</td>
</tr>
</tbody>
</table>
practical application. The twenty-third statement: The content of
graduate level courses was duplicative of material mastered at the
undergraduate level, was received with a response of "disagree" and a
mean of 2.476. The twenty-fourth statement: Graduate courses should
concentrate more on development of classroom teaching methods, received
an overall response of "undecided" with a mean of 3.429. The final
statement, number twenty-five: The Program provided me with knowledge
necessary to give occupational guidance to students within my classroom,
received a response between "undecided" and "agree" with a mean of 3.571.

Although the predominate attitudes were favorable toward the program,
there was some uncertainty concerning specific aspects of the curriculum,
regarding practicality. The findings of the first section have reflected
the mean responses to twenty-five statements, which represent the graduates' attitudes toward the program.

The second section of the questionnaire required responses to twentyone items that represented the specific course offerings in the program.
As in section one, the likert or summative rating scales were utilized
for ease in questionnaire design and evaluation and to insure a maximum
number of completed responses. Using the following response rating legend,
all participants were instructed to answer each closed form item by
encircling the response that best represented their opinion.

A = The course was of no value
B = The course of of slight value
C = The course was of moderate value
D = The course was of considerable value
E = The course was of great value

The data was extracted from the returned surveys and compiled into
tables for evaluation. Example table 10 was provided to assist in ex-
plaining the tables and interpolating the data.
### TABLE 9
**ATTITUDE SURVEY OF GRADUATES FROM THE MASTERS PROGRAM IN INDUSTRIAL ARTS EDUCATION AT OLD DOMINION UNIVERSITY**

**SECTION 1 QUESTION 23 THROUGH 25**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>The content of graduate level courses was duplicative of material mastered at the undergraduate level.</td>
<td>3</td>
<td>14</td>
<td>8</td>
<td>38</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>24</td>
<td>Graduate courses should concentrate more on development of classroom teaching methods.</td>
<td>2</td>
<td>10</td>
<td>4</td>
<td>19</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>25</td>
<td>The Program provided me with knowledge necessary to give occupational guidance to students within my classroom.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>14</td>
<td>4</td>
<td>19</td>
</tr>
</tbody>
</table>
### TABLE 10
ATTITUDE SURVEY OF GRADUATES
FROM THE
MASTERS PROGRAM IN INDUSTRIAL ARTS EDUCATION
AT
OLD DOMINION UNIVERSITY
SECTION 2 QUESTION 1 THROUGH 21

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>RESPONSE</th>
<th>PERCENT RESPONSE</th>
<th>A %</th>
<th>B %</th>
<th>C %</th>
<th>D %</th>
<th>E %</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>VIAE 680 Supervision in Vocational Education</td>
<td>10</td>
<td>45.5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

**TABLE KEY:** Item No. corresponds with survey statement number. Item represents the statement that is being addressed. Response identified the number of replies to each survey statement. Percent Response signifies the calculated percent responding to each survey statement. Response Ratings identifies the attitudes of the respondents. A = No Value, B = Slight Value, C = Moderate Value, D = Considerate Value, E = Great Value. % following each response rating expresses the percent of total responding to each rating. Mean is the sum of the measures divided by the number of measures. A point value of 1 thru 5 is assessed to the response ratings A, B, C, D, and E, respectively in determining the Mean.
Tables 11 and 12 provided the statistical data for each course offering outlined in section two of the survey. The first course: ECI 600 Introduction to Research, was accepted as providing "considerable" value to the program. This was indicated by a mean of 3.900. The second course: VIAE 536 Research in Education, was identified as being of "considerable" value by a mean of 3.900. The third course: VIAE 636 Problems in Education, was accepted to be of "considerable" value with a mean of 4.056. The fourth course: VIAE 660 History & Philosophy of Vocational Education, was accepted to be of "moderate" to "considerable" value with a mean of 3.625. The fifth course: VIAE 680 Supervision in Vocational Education, was accepted as of "moderate" to "considerable" value with a mean of 3.700. The sixth course: VIAE 682 Organization & Administration of Vocational Education, was accepted as of "considerable" value with a mean of 3.923. The seventh course: VIAE 687 Curriculum Development in Vocational Education, was favorably received as having "considerable" to "great" value with a mean of 4.375. The eight course: VIAE 510 Methods of Teaching Power & Transportation, was accepted as of "considerable" value with a mean of 4.000. The ninth course: VIAE 512 Methods of Teaching Communication, was of "moderate" to "considerable" value with a mean of 3.556. The tenth course: VIAE 514 Organization & Operation of Youth Clubs, was of "considerable" value with a mean of 3.750. The eleventh course: VIAE 595 Topics: Materials and Processes Technology, was of "slight" to "moderate" value with a mean of 2.667. It should be noted that only three of the twenty-one respondents had taken this course. The twelfth course: VIAE 695 Topics: Exploring Technology, was accepted as of "considerable" value with a mean of 4.000. The thirteenth course: VIAE Topics: New Teacher Seminar, was favorably accepted as of "great" value with a mean of 5.000. It should be noted that only one of the
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>RESPONSE</th>
<th>PERCENT RESPONSE</th>
<th>A %</th>
<th>B%</th>
<th>C%</th>
<th>D %</th>
<th>E %</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECI 600 Introduction to Research</td>
<td>10</td>
<td>48</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>VIAE 635 Research in Education</td>
<td>20</td>
<td>95</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>VIAE 636 Problems in Education</td>
<td>18</td>
<td>86</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>VIAE 660 History &amp; Philosophy of Vocational Education</td>
<td>.16</td>
<td>76</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>VIAE 680 Supervision in Vocational Educ.</td>
<td>20</td>
<td>95</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>10</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>VIAE 682 Organization &amp; Administration of Vocational Education</td>
<td>13</td>
<td>62</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td>7</td>
<td>VIAE 687 Curriculum Development in Vocational Education</td>
<td>16</td>
<td>76</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>VIAE 510 Methods of Teaching Power &amp; Transportation</td>
<td>9</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>VIAE 512 Methods of Teaching Communication</td>
<td>9</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>10</td>
<td>VIAE 514 Organization &amp; Operation of Youth Clubs</td>
<td>12</td>
<td>57</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>11</td>
<td>VIAE 595 Topics: Materials and Processes Technology</td>
<td>3</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>33</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>12</td>
<td>VIAE 695 Topics: Exploring Technology</td>
<td>11</td>
<td>52</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>36</td>
</tr>
</tbody>
</table>
twenty-one respondents had taken this course. The fourteenth course: VIAE 511 Methods of Teaching Manufacturing, was accepted as having "moderate" to "considerable" value with a mean of 3.500. The fifteenth course: VIAE 513 Contemporary Curriculum Activities in Education (World of Construction), was received as having "moderate" to "considerable" value with a mean of 3.643. The sixteenth course: VIAE 595 Topics: Career Education, was accepted as possessing "considerable" value with a mean of 4.154. The seventeenth course: VIAE 595 Topics: Industrial Safety, was of "considerable" to "great" value with a mean of 4.667. The eighteenth and nineteenth courses: VIAE 595 Organization & Administration of Industrial Cooperative Training, and VIAE 596 Curriculum Development for Industrial Cooperative Training, were accepted as having "considerable" value, each receiving a mean of 4.250. The twentieth course: VIAE 596 Competency Based Instruction in Vocational Education, was accepted as having "considerable" to "great" value with a mean of 4.400. The twenty-first course: VIAE 696 Advance Competency Based Instruction in Vocational Education, was favorably accepted as having "great" value with a mean of 5.000. It should be noted that only three of the twenty-one respondents had taken this course.

After examining the responses, the above findings were statistically analyzed by the researcher. The findings of the second section have reflected the mean responses to twenty-one statements, which represent the graduates' attitudes toward the specific course offerings in the program.

The final section of this chapter deals with the open form statement that instructed the respondents to list any subjects or areas of
### TABLE 12
ATTITUDE SURVEY OF GRADUATES FROM THE
MASTERS PROGRAM IN INDUSTRIAL ARTS EDUCATION
AT
OLD DOMINION UNIVERSITY
SECTION 2 QUESTION 13 THROUGH 21

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>RESPONSE</th>
<th>PERCENT RESPONSE</th>
<th>A %</th>
<th>B %</th>
<th>C %</th>
<th>D %</th>
<th>E %</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>VIAE 695 Topics: New Teacher Seminar</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5,000</td>
</tr>
<tr>
<td>14.</td>
<td>VIAE 511 Methods of Teaching Manufacturing</td>
<td>10</td>
<td>48</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>20</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>30</td>
<td>.3</td>
<td>30</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>15.</td>
<td>VIAE 513 Contemporary Curriculum Activities in Education (World of Construction)</td>
<td>14</td>
<td>67</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>21</td>
<td>3</td>
<td>21</td>
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<td></td>
<td></td>
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<td>4</td>
<td>29</td>
<td>4</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>VIAE 595 Topics: Career Education</td>
<td>13</td>
<td>62</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>2</td>
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<td>8</td>
<td>8</td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>VIAE 595 Topics: Industrial Safety</td>
<td>6</td>
<td>29</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td></td>
<td></td>
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<td>3</td>
<td>33</td>
<td>4</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>VIAE 595 Organization &amp; Administration of Industrial Cooperative Training</td>
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<td>21.</td>
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<td>14</td>
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<td>100</td>
<td>5</td>
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</table>
study that they felt would be of value or serve as special emphasis in an Industrial Arts Education graduate program. The primary intent was to obtain new ideas and/or areas which could be considered for possible inclusion in the present program.

Of the twenty-one returned surveys, thirteen responded to this section. The results were collated and reviewed in order to extract positive suggestions or comments that may aid in improving the graduate program. A complete listing of the responses may be found in Appendix E.

Many of the recommendations regarding specific course offerings are offered in the current Masters Program in Industrial Arts Education, while other courses may be taken as electives from other programs. Some of the suggestions included: Disciplinary procedures and implementation; teaching the disruptive student in the vocational classroom; topics in available funds for vocational programs; innovative teaching techniques; and mainstreaming the handicapped and disadvantaged students.

An analysis of the questionnaire responses revealed that 81.5 percent of the graduates surveyed responded to the questionnaire. The survey results were analyzed and calculated into mean scores representing the significant attitudes of the graduates. The information was then tabulated and included in the study for examination.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The purpose of this research paper was to evaluate the Master of Science Program in Industrial Arts Education at Old Dominion University, Norfolk, Virginia. This was accomplished by assessing the graduates' attitudes with respect to the effectiveness of the curriculum in preparing them for their present positions, as well as soliciting observations and recommendations for strengthening the program.

The review of literature noted that there were no criteria for evaluating the quality of graduate institutions. As is true of the graduate program in Industrial Arts Education at Old Dominion University, the informal opinion remains the most widely accepted basis for judging the merits of these institutions. For this reason, the attitude survey approach was chosen as a tool for evaluating the program.

In determining the graduates' attitudes toward the masters program, a questionnaire was prepared and mailed to all recent graduates of the program from 1974 through December 1979. The survey was divided into three sections. Section one evaluated the participant's attitudes toward the program's effectiveness, curriculum content, faculty-student relationships, grading method, and practical application. Section two evaluated individual courses, and section three provided the respondent an opportunity to make comments and suggestions for improving the overall program.

The questionnaire design followed the likert or summated scaling technique, for ease in answering each item and tabulating the results in
sections one and two. After receiving the completed surveys, the results in sections one and two were analyzed and percentages were calculated to determine the mean scores indicative of the attitudes of the graduates.

CONCLUSIONS

The outcome of this survey revealed a number of consequential findings. The responses to section one indicated that the graduate program provided adequate professional career development, relevant course content, strong faculty-student relationships, and a fair and justified grading method. Although the general consensus regarding the aforementioned areas was most favorable, some uncertainty surfaced regarding the validity of the program with respect to practical application.

Section two of the survey findings indicated that a majority of the graduates found significant values in most of the course offerings. The only exception was VIAE 595 Topics: Materials and Processes Technology, of "slight" to "moderate" value with only three participants having completed the course. Perhaps the low rating and small enrollment was due to a lack of interest in this subject area. In contrast, VIAE 696 Advance Competency Based Instruction in Vocational Education and VIAE 695 Topics: New Teacher Seminar with enrollments of one and three respectively, received ratings of "great value" with a mean score of 5.000. Since these two courses were of significant value to those who completed them, perhaps the low enrollment was due to concentration in other electives areas.

Given the opportunity to make comments and recommendations for improving the overall program in section three, the participants requested course offerings dealing with student discipline and educational funding.
RECOMMENDATIONS

Predicated upon the results and conclusions of this study, the following recommendations are offered for review by the graduate faculty of the Industrial Arts Education Department at Old Dominion University:

1. Offer courses or inservice programs related to the discipline of students in the vocational classroom.
   It is recommended that this course include research, role play, and brainstorming sessions which will prove beneficial to all participants.

2. Offer inservice programs related to the acquisition of local, state, and federal funding. In addition, it is recommended that this course include supply and tool acquisition related to vocational education. The sharing of unique ideas with fellow vocational teachers will prove rewarding to all teachers.

3. Emphasize the relationship of current course content to the practical teaching environment. This will provide an awareness of the value of each course offering to the total vocational education environment.

4. Provide inservice programs which update graduates' knowledges on current trends and innovations related to present course offerings.
BIBLIOGRAPHY

A. BOOKS


B. PERIODICALS


APPENDICES

Appendix A--List of Graduates Surveyed
Appendix B--Questionnaire Mailed to Graduates
Appendix C--Graduate Cover Letter
Appendix D--Graduate Follow-up Cover Letter
Appendix E--Response to Section Three: Open Ended Question
APPENDIX A

List of Graduates Surveyed
LIST OF GRADUATES SURVEYED

Richard Soloman
6120 Ivor Avenue
Norfolk, Virginia 23502

Donald Buchanan
3046 Bray Road
Virginia Beach, Virginia 23452

David Bunin
7320 Glenroie Avenue
Norfolk, Virginia 23505

John E. Jones
1412 Kempsville Road
Chesapeake, Virginia 23320

Donald Remy
5728 Chippewa Road
Virginia Beach, Virginia 23462

James White
3553 Byron Brog Drive
Virginia Beach, Virginia 23462

Robert Schirk
5190 Sharon Drive
Virginia Beach, Virginia 23462

David Smith
708 Valley Stream Road
Chesapeake, Virginia 23325

Leonard Stamer
1201 Homestead Drive
Virginia Beach, Virginia 23462

Samuel Bowers
P. O. Box 354
Mattaponi, Virginia 23110

Vernon Fueston
Route 1, Box 272
Hertford, North Carolina 27944

Willis Alexander
505 Harbrook Road
Virginia Beach, Virginia 23452

Jeffrey Forman
1625 E. Little Creek Road
Norfolk, Virginia 23518

Russell Griffith
334 Pelley Drive
Norfolk, Virginia 23502

James E. Perkinson, Jr.
P. O. Box 5066
Suffolk, Virginia 23435

James A. Roth
1442 West Little Neck Road
Virginia Beach, Virginia 23452

Steve Smith
1104 Kittery Drive
Virginia Beach, Virginia 23462

Edwin Ellis
313 Wynn Street
Portsmouth, Virginia 23701

Charles McAdams, Sr.
809 Tifton Street
Norfolk, Virginia 23513

James A. Johnson
Box 742
West Point, Virginia 23181

Robert Phelps
5033 Finn Road
Virginia Beach, Virginia 23455

Ronald Garrison
120 East Chester Street
Norfolk, Virginia 23503

Sidney Rader
4137 Wales Drive #202
Virginia Beach, Virginia 23452

Myron Curtis
911 Gates Avenue #B1
Norfolk, Virginia 23517
Section I  GRADUATE INDUSTRIAL ARTS PROGRAM FOLLOW-UP

Purpose: This section of the questionnaire is aimed at determining your attitudes toward the Master of Science Program in Industrial Arts Education. Follow the directions carefully and review the responses before starting.

Directions: For each of the items listed in this section, circle the one response that indicates your opinion. Please record your answers carefully.

Response ratings:

SD = Strongly Disagree
D = Disagree
U = Undecided
A = Agree
SA = Strongly Agree

Example:
SD D U A SA The Program was structured according to my individual educational needs.

NOTE: Program refers to the Master of Science Program in Industrial Arts Education.

SD D U A SA 1. The graduate program offers a wide spectrum of courses that meet my educational needs.

SD D U A SA 2. While employed in my present occupation, I frequently use the knowledge and skills I developed in the program.

SD D U A SA 3. The Program prepared me for the type of work I perform in my current job.

SD D U A SA 4. The Program was structured to meet my educational needs.

SD D U A SA 5. The Program provided activities that encouraged interaction with other graduate students.
6. The program helped me develop good oral and written communication skills.

7. The program is a realistic approach toward obtaining the training I needed for my present position.

8. The number of required and elective courses were appropriate for fulfilling the Program objectives.

9. The graduate level course content was current with modern theories, practices, and technologies.

10. The instruction in graduate level courses was always relevant to the course objectives.

11. I was always aware of the objectives and the competencies to be achieved in graduate level courses.

12. The graduate level course instruction was usually geared toward the individual rather than the class as a whole.

13. Using the knowledge I acquired while in the program, I feel confident that I could develop a sound curriculum for a subject area with which I am familiar.

14. The program helped me to develop a skill for evaluating, reporting, and developing research data.

15. The research project is an exceptionally good educational experience.

16. My research advisor provided me the necessary assistance in selecting and completing my research project.

17. My program advisor always provided me with appropriate consultative services.

18. My program advisor was available on an informal basis for consultations.

19. I was pleased with the faculty and their efforts.

20. I approved of the grading method used in graduate level courses.
SD D U A SA 21. There was appropriate time allocated for completing graduate level courses.

SD D U A SA 22. The final grade I received for graduate level courses was directly proportionate to my work efforts and the knowledge I attained in those courses.

SD D U A SA 23. The content of graduate level courses was duplicative of material mastered at the undergraduate level.

SD D U A SA 24. Graduate courses should concentrate more on development of classroom teaching methods.

SD D U A SA 25. The Program provided me with knowledge necessary to give occupational guidance to students within my classroom.

Section II

Purpose: In this section, you are asked to provide a judgemental rating of each course you have taken. Follow the directions carefully, accurately and objectively as possible.

Directions: This section contains the courses most frequently taken by graduate students. Please circle a number representing the rating that best indicates YOUR FEELING about the value of each course. Only respond to courses you have taken.

Response rating:

A = The course was of no value.
B = The course was of slight value.
C = The course was of moderate value.
D = The course was of considerable value.
E = The course was of great value.

Example:

A    B    C    D    E   VIAE 680 Supervision in Vocational Education

A    B    C    D    E   1. ECI 600 Introduction to Research
A    B    C    D    E   2. VIAE 635 Research in Education
A    B    C    D    E   3. VIAE 636 Problems in Education
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<td>VIAE 680</td>
<td>Supervision in Vocational Education</td>
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<td>VIAE 682</td>
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<td>Methods of Teaching Power &amp; Transportation</td>
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<td>Organization &amp; Operation of Youth Clubs</td>
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<tr>
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<td>Topics: Materials and Processes Technology</td>
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<td>VIAE 513</td>
<td>Contemporary Curriculum Activities in Education (World of Construction)</td>
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<tr>
<td>VIAE 595</td>
<td>Topics: Career Education</td>
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<td>Advance Competency Based Instruction in Vocational Education</td>
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Section III

Purpose: In this section you have the opportunity to make any suggestions or comments that you believe may aid us in improving our graduate program in Industrial Arts Education.

Directions: In the spaces below, list any subjects or areas of study that you feel would be of value or deserve special emphasis in a graduate Industrial Arts Education Program. We are primarily looking for new ideas and/or areas that have been neglected in our present program.

1.________________________________________________________

2.________________________________________________________

3.________________________________________________________

Please feel free to make any constructive comments in the following space:

Thank you for your time and effort.
APPENDIX C

Graduate Cover Letter
April 25, 1980

Dear Alumni,

This letter and accompanying questionnaire is being sent to all recent graduates of Old Dominion University who have received a Master of Science Degree in Education with a program of studies in Industrial Arts Education.

In order for the Vocational and Industrial Arts Education graduate program to continue providing effective learning experiences, it must periodically be evaluated. As a graduate of the program, you are presented the opportunity to make suggestions regarding the effectiveness of the curriculum in preparing you for your present position.

The enclosed questionnaire is divided into three sections. Section one evaluates the student's attitude toward the program; section two evaluates the individual courses; and section three provides you an opportunity to make comments and recommendations regarding the overall program.

The remaining phases of this research cannot be completed until the questionnaire responses have been analyzed. In order to facilitate a timely completion of this project, please complete the questionnaire and return it in the enclosed, self addressed stamped envelope by May 10, 1980. Please feel free to comment on any aspect of the curriculum not covered in the questionnaire. A summary of the results will be provided upon request.

Thank you for your cooperation.

Sincerely,

Michael L. Davenport
Graduate Student

John M. Ritz
Graduate Program Director

MLD/JMR/pt
APPENDIX D

Graduate Follow-Up Cover Letter
June 5, 1980

Dear Alumni:

On May 15, 1980, a questionnaire designed to evaluate the Vocational and Industrial Arts Education graduate program was mailed to all its alumni. At this time, responses have not been received from all the graduates selected to participate in the survey. If you have returned the completed questionnaire, please disregard this reminder. If not, please complete and return the questionnaire in the enclosed self addressed stamped envelope by June 15, 1980. In the event that you have misplaced the questionnaire, I have enclosed a duplicate.

In order to achieve a valid evaluation that will provide meaningful and effective improvements in the current program, 100% participation is desirable.

Thank you for your cooperation.

Sincerely,

Michael L. Davenport
Graduate Student

John M. Ritz
Graduate Program Director

MLD/JMR/pt
Enclosure
APPENDIX E

Response to Section Three - Open Ended Question
1. Technical Writing
2. Counseling Techniques
3. Classroom Management - Emphasis on Time Management, Tool and Material Controls
4. Mainstreaming
5. Administration in the Classroom
6. Disciplinary Implementation
7. Teaching the Disruptive Student in Vocational Classrooms
8. Supply Acquisition
9. Organization and Administration
10. Career Education
11. School Law
12. Drug Recognition
13. New Teaching Techniques
14. Teacher/Student Interaction
15. School Clubs and Organizations
16. Student Motivation
17. Community Relations
PROPOSED PROGRAM MODIFICATIONS

1. More Occupationally Oriented
2. Increase Scholarship Fund For New Students
3. Curriculum Development - Write A Complete Curriculum
4. Information on Funds Available For Programs
5. Interface With Higher Education