An Analysis of the Reasons and Influences Causing Students to Enroll in Industrial Arts Education Programs at Virginia Universities

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AN ANALYSIS OF THE REASONS AND INFLUENCES CAUSING STUDENTS TO ENROLL IN INDUSTRIAL ARTS EDUCATION PROGRAMS AT VIRGINIA UNIVERSITIES

Submitted to the School of Education of Old Dominion University In Partial Fulfillment of the Requirements for The Degree of Master of Science Education

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This research paper was prepared by Robert O. Beauter, Jr. under the direction of Dr. John M. Ritz in VTE 636, Problems in Education. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Master of Science in Education.

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Chapter I
INTRODUCTION

During a time when a large portion of the population was unemployed, the field of vocational education, and more specifically industrial arts education, had a growing shortage of qualified teachers to fill vacant positions. The number of students enrolled in the Industrial Arts Education Program at Old Dominion University had declined over the past six to seven years while job openings in this area had gone unfilled in the State of Virginia. The current shortage of industrial arts teachers did not seem to be a situation that would remedy itself anytime in the near future (Buchanan, 1978, p. 11).

To deal with the shortage on the national level, numerous strategies had been employed by various universities in the recruitment of industrial arts education majors. Some of the techniques used had been open house programs, pamphlets or brochures, high school visits, and talking with high school guidance counselors. The various methods had been used with varying degrees of success by the different industrial arts education programs throughout the country (Carr, 1979, p. 29, Table 4). The one thing all the programs had in common was the recognition of the fact that in order to attract students to their programs an active recruitment program was vital.

The years of 1973-1975 showed the largest number of student receiving degrees in Industrial Arts Education at Old Dominion University, an average of thirty. Since the peak years the number of degrees awarded had steadily declined with twenty-five degrees
awarded in 1977 (Buchanan, 1978, p. 17, Table 1). The decline continued with fourteen degrees being awarded in 1979 and four in 1982. The 1982 statistic was seen as the low point in this trend and for 1983 the number of degrees to be awarded had been projected to be eighteen (Department of Vocational and Technical Education, 1982, p. 19). Even with the increased number of graduates, the State of Virginia would still be lacking of industrial arts teachers.

In order to increase the enrollment in the industrial arts program and the number of graduates, it was necessary to adopt a recruitment program. By active recruiting it would be possible to let prospective students know of the possibility of a career in industrial arts and the many openings available to the graduate. Lack of efforts to attract students was seen, in part, as one of the causes of the current decline in graduates in industrial arts. By the application of an effective recruitment program it would be possible to attract the necessary number of students to meet the state's need for the 1980's (Department of Vocational and Technical Education, 1982, p. 1).

To help in the recruitment efforts this study was conducted to analyze which parts of a recruitment program can be the most effective. By conducting this study it was possible to identify the reasons for a student's enrollment in a university industrial arts program. Where the students have come from and who had the most influence on their decision to enroll in the program was also determined. By using this information in the planning of a recruitment program it would be possible to make the efforts at recruiting as effective as
possible and to maximize the number of students enrolling in and graduating from the Industrial Arts Education Program at Old Dominion University and ultimately entering the teaching profession.

STATEMENT OF THE PROBLEM

The problem of this study was to conduct a survey of industrial arts education majors at Virginia universities to identify and analyze their reasons for enrolling in a university industrial arts education program and who had the most influence on their decision. This data would be used as an aid in recruiting students for the Industrial Arts Education Program at Old Dominion University.

RESEARCH GOALS

Through the analysis of the reasons given by students for enrolling in a university industrial arts program, the following questions would be answered. These could assist the department in determining where to place the emphasis when planning strategies to be used in the recruitment of students for the Industrial Arts Education Program at Old Dominion University.

1. What were the students reasons for enrolling in a university industrial arts program?

2. Who had the most influence on the student's decision to enroll in an industrial arts education program at the university level?

3. What would be the most effective approaches to use in efforts to recruit students for the Industrial Arts Education Program at Old Dominion University?
BACKGROUND AND SIGNIFICANCE

The decline in enrollment in industrial arts education can be curbed by an effective recruiting program. Through recruitment it would be possible to meet the need for teachers in the secondary school system in Virginia (Department of Vocational and Technical Education, 1982, p. 1). A study by Carr (1979) concluded that recruitment of industrial arts majors was an effective method in increasing enrollment at the university level. According to his study the most effective methods of recruitment were the personal contact with the prospective student and the high school visitation (p. 27). The fault in Carr's approach was that he did not actually establish that it was the recruiting techniques that were responsible for any rise in student enrollment. By approaching the student, this study was able to establish which methods had the most impact and influence on the student.

Previous studies had been conducted to determine the motives of students planning to enter the teaching field. Many of the reasons given by these studies were no longer valid due to the changing social and economic climate. An example of this would be the 1961 study conducted by Fox. According to Fox, one of the significant factors cited by prospective teachers was the interest in the increasing salaries of teachers (Fox, 1961, p. 428). Today the salary of a teacher was very unlikely to emerge as a motivating factor. More examples of motives that were significant at one time but were no longer valid were brought out in the Review of Literature.
Over the years the ability to attend college had expanded to include a wide range of people. Studies conducted during the sixties and early seventies were likely to include a wide range of people that did not have college available to them at the time. By conducting this survey now it would be possible to include the wide spectrum of people that make up our university system today.

The conducting of the survey had made it possible to determine the current reasons for enrollment in an industrial arts program and where the largest amount of influence on the student came from today, enabling the recruitment program at Old Dominion University to function in the most effective method.

LIMITATIONS

The following limitations were applied to this study:

1. The survey was distributed only to freshman and first term industrial arts students. This was done because these students were the most likely to be able to accurately recall the factors influencing their enrollment.

2. The sample was limited to only universities with industrial arts programs in Virginia. This was done to make collection of the research easier and was purely arbitrary.

ASSUMPTIONS

The following assumptions were prerequisites of this study:

1. The students completing the survey were capable of determining what and who influenced them in making their decision to enroll in industrial arts education.
The information gathered in this study would be useful in planning the recruiting program for industrial arts education at Old Dominion University.

PROCEDURES

A short questionnaire was developed asking the student a series of questions dealing with what were the reasons for their enrollment in the program, who influenced them the most in making that decision, and what was their past association with industrial arts. The questionnaire was sent to the department heads at Old Dominion University, Norfolk State University, George Mason University, Virginia State University, and Virginia Polytechnic Institute and State University. A cover letter included in the packet explained the purpose of the study and asked the department heads to administer the surveys to all their freshmen and first term students in the industrial arts department. After conducting the study it was returned in an envelope included in the packet.

The results of the survey were then tabulated and the information was then analyzed to determine the most common reasons and influences stated by the students. This information was then used to determine how the recruitment program at Old Dominion University could be improved.

DEFINITION OF TERMS

The following terms associated with this study were defined to clarify their meaning:

1. Industrial arts education - an educational discipline founded
upon a body of knowledge known as industrial technology. One of the divisions of vocational education.

2. **Vocational education** - that part of the total program of education which dealt with the preparation and training for careers below the professional level.

3. **Reasons for enrolling** - the internal factors that motivated the student to enroll in his/her program of study.

4. **Influence on the student** - the external factors or persons that helped the student to make the decision to enroll in his/her program of study.

**OVERVIEW**

The first chapter examined a number of items. The shortage of industrial arts teachers was presented, and the fact that this was a problem that would continue to exist. One of the causes of the teacher shortage had been shown to be the lack of students graduating from university industrial arts programs. It was seen how many industrial arts programs had begun to employ various recruiting methods to attract prospective students.

The Industrial Arts Education Program at Old Dominion University had recognized the need for a recruiting program to increase student enrollment. This study helped that effort by determining the current reasons for enrolling in a university industrial arts program and the major influences on the student in making that decision. By using this information the recruiting program could achieve the maximum results.
In the chapters to come a number of factors were examined before reaching the final conclusions. The second chapter dealt with current literature pertinent to this study. The shortage of teachers and industrial arts education graduates were further examined. The second chapter examined past studies of motivations for teaching to see what conclusions were made. Chapter three examined the development of the instrument used in this study and the methods used to gather the data. In chapter four the information gathered by the study was presented. The final chapter provided an analysis of the data and showed how it could be applied to the development of the recruiting program for the Industrial Arts Education Program at Old Dominion University.
Chapter II

REVIEW OF LITERATURE

In the second chapter of this study a review of current literature dealing with student enrollment was conducted. Three major areas of concern were examined. The first area researched dealt with the decline in enrollment of industrial arts students at the university level and the lack of sufficient numbers of teachers to fill existing positions at the secondary level. The second area examined dealt with research previously conducted on why students selected teaching as a profession and who influenced their decision. Finally, a review was conducted of literature that studied recruiting methods which were currently being used and their effectiveness. In the majority of the cases the research examined dealt specifically with students in industrial arts education programs, however some of the early research dealing with reasons for teaching was conducted using secondary education students.

DECLINE IN INDUSTRIAL ARTS TEACHER EDUCATION MAJORS

The decline in student enrollment in education and the shortage of industrial arts teachers has been documented in numerous publications in the last few years. The year of 1965 saw nearly twenty-two percent of all freshmen entering United States colleges and universities enrolling in an education program. By 1975 the number of students falling into the same category had dropped to six and one half percent (Herman, 1978, p. 693). Turning to industrial arts nationwide, from 1975 to 1979 approximately fifty-seven percent of
the universities with industrial arts education programs showed a decrease in enrollment and twenty-four percent had an enrollment that remained constant. During the same time period thirty-seven percent of the institutions showed a decrease in the number of industrial arts education graduates and thirty-seven percent remained at the same level (Carr, 1979, p. 25).

Old Dominion University has followed the national trend, with the number of degrees awarded dropping from the peak years of the seventies as seen in Table 1 (Department of Vocational and Technical Education, 1982, p. 19).

**TABLE 1**

INDUSTRIAL ARTS EDUCATION DEGREES AWARDED AT OLD DOMINION UNIVERSITY

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Degrees</th>
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<tbody>
<tr>
<td>1974</td>
<td>23</td>
</tr>
<tr>
<td>1975</td>
<td>30</td>
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<tr>
<td>1976</td>
<td>25</td>
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<td>25</td>
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<td>1978</td>
<td>26</td>
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<td>1979</td>
<td>14</td>
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<tr>
<td>1980</td>
<td>30</td>
</tr>
<tr>
<td>1981</td>
<td>21</td>
</tr>
<tr>
<td>1982 projections</td>
<td>4</td>
</tr>
</tbody>
</table>
With the decrease of enrollment in industrial arts education programs the profession has seen a decrease in the number of qualified teachers available to fill vacant positions. One source reported that it was not unheard of to have prospective teachers offered jobs over the phone without an interview (The Journal of Epsilon Phi Tau, 1978, p. 44). While many areas of education had reported a surplus of teachers, the field of industrial arts education had consistently reported a shortage of teachers (Applegate et al, 1982, p. 565). Across the country twenty-one states had reported a "severe" shortage of industrial arts teachers (Craft, 1980, p. 21).

The shortage of industrial arts teachers did not appear to be a situation that would remedy itself soon. It had been predicted that with the current shortage and the rate at which it would continue, the State of Virginia could easily support an increase in the number of students receiving an Industrial Arts Education Degree and entering the teaching profession (Buchanan, 1978, p. 11).

The lack of an adequate number of industrial arts teachers had already begun to take effect on the status of industrial arts courses in the United States. Data from a 1978 study showed that already some industrial arts programs were being curtailed or closed because teachers could not be found (Craft, 1980, p. 21). If a supply of teachers was not available it would force decreased enrollment, reduced finances, and eventually the further closing of industrial arts programs. As secondary school programs were closed the need for teachers and teacher education would drop with the result eventually being the closing of university programs and the eventual deterioration of the profession (Edmunds, 1980, p. 17).
Carr (1979) determined that many universities conducting active recruiting had been able to increase or stabilize their student enrollment. Carr stated that recruitment was an opportunity for the faculty and administration to put forth a positive effort to increase the student population. One of the recommendations made at the conclusion of the study was that a recruitment plan be developed and carried at Old Dominion University (Carr, 1979, p. 1).

In the first chapter it was pointed out that the faculty of the Industrial Arts Department at Old Dominion University had acknowledged the need to initiate a recruiting program to attract students to the program. It had been recognized that by using an extensive recruiting effort the University should be able to provide enough graduates to meet the needs of Virginia secondary schools in industrial arts (Department of Vocational and Technical Education, 1982, p. 4).

**STUDENT'S REASONS FOR SELECTING TEACHING AS A PROFESSION**

In order to plan an effective recruiting program it was necessary to know the reasons for students enrolling in industrial arts education and who had influence on the student in making the decision. By determining these reasons and influences it was possible to determine where to place the emphasis in the recruiting effort. In determining who had the most influence on the student's decision to teach, virtually all the research agreed that a high school teacher was extremely influential. Fielstra (1955) concluded that former teachers were the most influential with friends and relatives rated second (Wood, 1978, p. 48). In 1961 it was determined that seventy-five percent of the students entering education were influenced by a
former teacher with forty-eight percent saying that the influence of
the teacher was significant (Fox, 1961, p. 428). Moving forward
almost twenty years, similar conclusions were reached. Clark (1980)
wrote that the industrial arts teacher had the most influence on the
entering industrial arts education student. It was also concluded
that guidance counselors, principals, and other teachers had far
less effect on the student (Craft, 1980, p. 21).

While the greatest influence came from past teachers, the most
influential factor was described as a satisfactory industrial arts
experience at the high school level. One of the reasons cited for
the amount of influence given to the teachers and the industrial
arts experience was the fact that while most students did not make
their career decision until they were in college, most students
developed their interest while in high school (Craft, 1980, p. 21).

Based upon previous research, it appeared that by contacting
industrial arts teachers, especially alumni, it would be possible
to increase the number of students enrolling in a university indus­
trial arts program. Additionally, by turning out quality teachers,
the industrial arts education programs would be capable of providing
themselves with a steady flow of prospective teachers.

Over the years numerous studies had been conducted to deter­
mine the reasons people wanted to teach. A study of this nature
could be difficult to analyze because a person's reasons for teach­
ing may change with time. A student's response to why they wanted
to teach may vary from those given by an experienced teacher. For
this reason this review was limited to studies conducted using
students in a teacher education program, information which would be the most applicable to this study.

Haubrich (1960) conducted a study to determine why one hundred and ninety-five students at the University of Utah had selected teaching as their course of study. He found that about thirty percent of the students cited job security as one of the major reasons for their enrollment. This gave rise to the "mattress" theory, that was, a lot of students saw teaching as something to fall back on. Twenty-six percent of the students cited the professional standing of the teacher as a motivational factor. Closely related to the last two findings was the fact that only thirty-five percent of the students felt that becoming a successful teacher was a major goal in their life. The last two figures raised the question of how deep the conviction of the students was toward teaching and why they were enrolled in an education program (Haubrich, 1960, p. 381).

In responding to the questionnaire, answers such as short hours and summers off did not figure prominently in the decision to teach. It was considered possible that these may have been motivating factors yet they were not selected because the students were not willing to admit to wanting "easy" work (Haubrich, 1960, p. 381).

A study by Fox (1961) was conducted at Northern Illinois University. The information gathered in this study came from students in elementary and secondary education. In this review of literature only the data related to secondary students was reported. In answering the questionnaire, students were asked to rate a series of twenty-five factors as to whether they had significant, little, or no influence at all in their decision to teach.
Eighty-five percent of the respondents felt that their liking for a subject was highly significant in their decision to teach. This proved to be consistent with the findings by Craft (1980). When asked about their desire to work with children or adolescents, eighty percent felt it was a significant factor. Seventy-one percent felt the desire to impart knowledge figured in their decision to teach. In contrast to the study conducted by Haubrich (1960), forty-five percent of the students cited the advantages of teaching, such as short days, as a significant factor. Additional factors stressed by the students were the flexibility teaching affords in the ability to leave and then return at a later time, job security, and the ability to move from one area to another. The influence of a high school or a college guidance counselor were each rated by sixty-five percent of the students as having no influence at all (Fox, 1961, p. 427).

A study of seniors at an Illinois teachers college was made by Saxe (1969). After receiving the responses the data was placed into five categories by a group of three judges. The largest group dealt with idealistic reasons, such as the desire to contribute to society. The next largest group were the answers that implied that teaching was a good job. The third group contained answers that suggested that the student was influenced or encouraged by another person. The fourth ranked group contained answers that dealt with personal experiences. The responses in this category would include such items as having a successful industrial arts experience in high school. The final and smallest group were answers that suggested a love of school or teaching (Wood, 1978, p. 48).
CURRENT RECRUITMENT TECHNIQUES AND THEIR EFFECTIVENESS

The final area that was examined in this chapter looked at current recruiting techniques that were felt to be effective. In order to recruit students it was necessary to know where the prospective students came from.

Nationwide eighty-two percent of the universities with industrial arts education programs realized their students from high schools. Due to this fact, ninety-three percent of the universities contacted high schools in their recruiting efforts. An equally high percentage of seventy-four percent, realized their students from on campus transfers (Carr, 1979, p. 27). One school said that they found non-majors a good source for students and worked closely with the counseling center (Edmunds, 1980, p. 21). A third major source of students was the community and junior college system. Nationwide, thirty-two percent of the schools have reported receiving their students from this source (Carr, 1979, p. 27).

Schools located near military bases have used this as another source of prospective students. Some schools located in close proximity to military bases have reported that a high percentage of prospective students have been retired military personnel (Edmunds, 1980, p. 21).

Although the methods varied, most universities reported doing their recruiting through the area high schools. Some schools have reported effectively using students to speak to area high school industrial arts classes and clubs. The reason that students were used was the schools felt that happy students were the best recruiting
agent. Personal visits by faculty members, students, student teachers, and student teacher supervisors to the student body and guidance counselors provided some schools with an influx of students (Carr, 1979, p. 4).

While most schools made contact with high school industrial arts classes, one school disagreed with the technique and did not contact high schools. The disagreeing school felt that high school industrial arts students seldom attended college and felt that contacting these students was a waste of time (Edmunds, 1980, p. 21).

A second effective recruiting technique was the use of the open house. Some of the schools that have used open houses have reported an increase in enrollment (Craft, 1980, p. 21). Improved open house activities to include tours, skill contests, and A.I.A.S.A. coordinated activities have been recommended to help recruit prospective students. It had been discovered that open house activities were most effective when held as a two to three day weekend, with the student as a guest of the university (Carr, 1979, p. 36). Although highly effective, this approach may have proved financially impractical for most institutions to conduct on a large scale basis.

Other recruiting techniques being used included the use of college catalogs, folders and brochures. These techniques have been used with varying degrees of success (Craft, 1980, p. 21).

Most of the schools that had been surveyed about their recruiting techniques had come to agree on two points. The first point of agreement was that contacting area high schools was a good source
of prospective students. The second area of agreement was that the high school industrial arts teacher was effective in recruiting students for the university industrial arts education program.

SUMMARY

The second chapter of this paper has examined several points that were important in attempting to plan a recruitment program. The first area of concern dealt with the declining enrollment in university industrial arts programs, the shortage of industrial arts teachers and the results of the shortage. The next area reviewed was past studies dealing with reasons for teaching and who influenced the student in deciding to teach. The final area was an examination of the current methods used to recruit students to a university industrial arts education program.

In the next chapter the methods and procedures used to conduct this study were examined. Selection of the sample, construction of the questionnaire and its administration were among the subjects discussed.
CHAPTER III

METHODS AND PROCEDURES

By surveying students enrolled in industrial arts education at the university level, it was possible to determine their reasons for enrolling in industrial arts and who influenced them in making the decision. Analyzing this information made it possible to determine what would be the most effective ways to recruit students for the Industrial Arts Education Program at Old Dominion University. In this chapter population selection, instrument development, and the procedures used were discussed.

POPULATION

The students enrolled in industrial arts education programs at Virginia universities served as the population. The schools included George Mason University, Norfolk State University, Old Dominion University, Virginia Polytechnic Institute and State University, and Virginia State University. The selection of only Virginia universities was done for economic reasons.

For this study the sample was limited to freshmen and first term industrial arts education students. First term students were considered to be students that were enrolled in their first semester, or quarter, as an industrial arts education major. As the students progressed through the industrial arts education program, their reasons for remaining in the program may change and they may have forgotten the factors that helped influence them in making their decision to enroll in industrial arts. To avoid these pitfalls
and to assure that the information collected would be applicable to recruiting, freshmen and first term students were used as the sample.

During the initial phone contact with the department heads at the participating schools, it was determined that the sample size would be approximately sixty-one students. When the forms were returned the actual sample size was fifty-seven.

INSTRUMENT

In order to gather the information needed, a short survey (Appendix A) was developed asking the student a series of questions concerning their enrollment in industrial arts education. The survey consisted of a series of eleven closed end questions. After the initial draft of the survey was completed it was distributed to various members of the Industrial Arts Education faculty at Old Dominion University seeking their suggestions on how to improve it.

The survey questions were designed to gather information in four major areas. The first area dealt with general background information about the students. This section attempted to determine the class status of the students, any previous majors, why the university was selected, and if the students had been involved with careers prior to enrolling in school.

The second area of the survey was concerned with the student's previous association with industrial arts. The questions asked were designed to determine if the students had taken any industrial arts courses in junior or senior high school and if the students had been involved with the American Industrial Arts Student Association.
Questions asked in the third category sought information from the students concerning their enrollment in the university industrial arts program. The students were asked why they enrolled in the program, if anyone had encouraged their enrollment, and how they had learned about the program.

The final area asked the students what their intentions were after graduation.

PROCEDURES

Initial contact with the head of the industrial arts education program was made by telephone. During this conversation, the researcher discussed the nature and purpose of the study and asked for assistance in completion of the study. At this time, the approximate size of the sample was determined.

The survey, a cover letter (Appendix B) explaining the survey and how to administer it, and a postage paid return envelope were sent to the participating universities. A second phone call was made after the packets were mailed informing the department heads that the survey was in the mail.

After the surveys were returned, the researcher assembled the data collected. The information was then analyzed to determine how it would help in making the recruitment program at Old Dominion University as effective as possible.

SUMMARY

This chapter has dealt with the methods and procedures that were used in conducting this study. Selection of the population
and sample were outlined. The development of the instrument and the areas covered by it were discussed. The final section of this chapter explained how the survey was distributed to the universities involved and how the information was used after it was collected.

The next chapter, Findings, detailed what the information collected revealed about the student's reasons and influences in enrolling in industrial arts education.
CHAPTER IV

FINDINGS

The purpose of this study was to identify and analyze the reasons students enrolled in industrial arts teacher education programs at Virginia universities, and who influenced their decision. The research questions set forth in Chapter I were:

1) What were the student's reasons for enrolling in a university industrial arts program?
2) Who had the most influence on the student's decision to enroll in an industrial arts education program at the university level?
3) What would be the most effective approaches to use in efforts to recruit students for the Industrial Arts Education Program at Old Dominion University?

The data collected by the survey was reported in this chapter and can be classified into four areas. The first area attempted to determine background information on the students. The second area sought information concerning the student's prior involvement with industrial arts at the junior or senior high level. The third area examined the reasons the students enrolled in the program and who encouraged them in making their decision. The final area asked the student of their career intentions after they completed their program.

The survey was distributed to the five Virginia universities offering industrial arts: George Mason University, Norfolk State University, Old Dominion University, Virginia Polytechnic Institute and State University, and Virginia State University. It was then administered to first-term and freshman students. At the beginning of the study the populations size
had been approximated at sixty-one students. When the surveys were
returned the actual student population was fifty-seven because the
original figure had been an estimate. The results reported in this chapter
were a compiling of the data collected by the survey.

BACKGROUND INFORMATION

The first survey question asked the student to determine their
status in relation to the industrial arts program at their university.
The responses to this question were listed in Table 2. Out of the
students responding, just over half, 50.9 percent, were freshmen. The
next larger group, comprising 22.8 percent, were the students
transferring from a community college. The third largest group, 17.5
percent, were the students transferring from another department within
the university. The smallest group, made up of 8.8 percent of the
students, were those that had transferred from another university.

The second question asked students that had been enrolled in another
program, or at another school, what their program of studies had been.
The answers to this question were also reported in Table 2. Students
responding to this question represented 47.4 percent of the population.
This question received an answer from twenty-seven students who cited
fourteen different majors with only six being listed more than once.
The greatest number of students, 25.9 percent, responded that they had
been involved in a General Studies Program. The second largest reported
group, with 14.9 percent, was Automotives. The responses to this category
were listed as Automotive Diagnostics and Automotive Mechanics.
<table>
<thead>
<tr>
<th>Source of Students</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>29</td>
<td>50.9</td>
</tr>
<tr>
<td>Transfer from community college</td>
<td>13</td>
<td>22.8</td>
</tr>
<tr>
<td>Transfer from another department</td>
<td>10</td>
<td>17.5</td>
</tr>
<tr>
<td>Transfer from another university</td>
<td>5</td>
<td>8.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous majors</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies</td>
<td>7</td>
<td>25.9</td>
</tr>
<tr>
<td>Automotives</td>
<td>4</td>
<td>14.9</td>
</tr>
<tr>
<td>Engineering</td>
<td>3</td>
<td>11.1</td>
</tr>
<tr>
<td>Biology</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Business</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>English Literature</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Industrial Education</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Forest Resources Management</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Printing Technology</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Psychology</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Sociology and Criminal Justice</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>Technical Theatre</td>
<td>1</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Engineering had been the program of study of 11.1 percent of the students. Business, Biology, and Health and Physical Education each had been the major of 7.4 percent of the responding students. The remaining subjects were each mentioned by 3.7 percent of the students responding to this question. The remaining areas included English Literature, Forest Resources Management, Industrial Education, Printing Technology, Psychology, Science, Sociology and Criminal Justice, and Technical Theatre.

Question number three attempted to determine why the students had selected the university they were attending. In responding to this question several students gave more than one reason for enrolling in the university. The answers to this question were given in Table 3. In answering this question three responses were cited an almost equal number of times by the population. The reputation of the university was given as a reason by 24.2 percent of the students. Close behind was the ability to commute which was the reason for selection by 22.0 percent of the students. The third most frequently given answer was the cost of the university, being mentioned by 20.1 percent of the population. The fact that a relative was an alumni was the reason of 11.0 percent of the students. Being accepted to their university first was the reason of 6.1 percent of the population. Reasons not listed in the survey were cited by 6.1 percent of the students. The responses given that were not listed in the survey included baseball scholarship, "told about the university", location, connected with a community college, and scholarship. Each of these responses was named by 1.2 percent of the respondents. No response was given by 2.4 percent of the students returning the survey.
TABLE 3
REASONS FOR UNIVERSITY SELECTION

<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>20</td>
<td>24.2</td>
</tr>
<tr>
<td>Ability to commute</td>
<td>18</td>
<td>22.0</td>
</tr>
<tr>
<td>Cost</td>
<td>17</td>
<td>20.7</td>
</tr>
<tr>
<td>Relative is an alumni</td>
<td>9</td>
<td>11.0</td>
</tr>
<tr>
<td>Accepted first</td>
<td>5</td>
<td>6.1</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>6.1</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses to &quot;other&quot;</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball scholarship</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>&quot;Told about the university&quot;</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Location</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Connected with community college</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Scholarship</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>
The final question seeking background information from the student was question number four. It asked the students if they had been involved with a career prior to entering the university industrial arts program. The response to this question was listed in Table 4. Only 14.0 percent of the students involved in the survey stated that they had pursued a previous career. The eight students with previous careers listed seven different career fields. Carpentry was the only career that was pursued by more than one person, with 25.0 percent of the students reporting careers having been involved in it. The remaining occupations, each with 12.5 percent of the responses were: machinist, electrician apprentice, auto mechanic, community college worker, media technician, and railroad mechanic. When asked how long they had been involved with their careers 50.0 percent replied that they had worked for two years. The longest career time was a period of nine years. Each one of these received 12.5 percent of the students' responses. One student, also representing 12.5 percent stated that he had been employed for "years".

PRIOR ASSOCIATION WITH INDUSTRIAL ARTS

The second area in which the survey sought information was the student's prior involvement with industrial arts. Question number five asked the students if they had taken any industrial arts courses at the junior or senior high school level. This information was recorded in Table 5. At the junior high level 70.2 of the students had taken industrial arts courses and 29.8 percent reported having taken no industrial arts at that time. When asked if they had taken industrial arts courses in grades ten through twelve, 66.7 reported that they had and 32.3 indicated they had not been involved in these classes.
### TABLE 4

**STUDENTS WITH PRIOR CAREERS**

<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with prior careers</td>
<td>8</td>
<td>14.0</td>
</tr>
<tr>
<td>Students not having prior careers</td>
<td>49</td>
<td>86.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous Careers</th>
<th>#</th>
<th>%</th>
<th># of years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry</td>
<td>2</td>
<td>25.0</td>
<td>2, several</td>
</tr>
<tr>
<td>Machinist</td>
<td>1</td>
<td>12.5</td>
<td>2</td>
</tr>
<tr>
<td>Electrician Apprentice</td>
<td>1</td>
<td>12.5</td>
<td>2</td>
</tr>
<tr>
<td>Auto Mechanic</td>
<td>1</td>
<td>12.5</td>
<td>2</td>
</tr>
<tr>
<td>Community College Worker</td>
<td>1</td>
<td>12.5</td>
<td>4</td>
</tr>
<tr>
<td>Media Technician</td>
<td>1</td>
<td>12.5</td>
<td>6</td>
</tr>
<tr>
<td>Railroad Mechanic</td>
<td>1</td>
<td>12.5</td>
<td>9</td>
</tr>
<tr>
<td>Activity</td>
<td># Yes</td>
<td>%</td>
<td># No</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>I.A. Courses grades 7-9</td>
<td>40</td>
<td>70.2</td>
<td>17</td>
</tr>
<tr>
<td>I.A. Courses grades 10-12</td>
<td>38</td>
<td>66.7</td>
<td>19</td>
</tr>
<tr>
<td>Member A.I.A.S.A.</td>
<td>6</td>
<td>10.5</td>
<td>51</td>
</tr>
<tr>
<td>Officer A.I.A.S.A.</td>
<td>1</td>
<td>1.8</td>
<td>56</td>
</tr>
</tbody>
</table>
The involvement of the students with the American Industrial Arts Student Association in the junior or senior high school was questioned in the sixth question. The students answers to these questions were listed in Table 5. Few of the students, 10.5 percent responded that they had been involved with the organization. Of the 89.5 percent of the students indicating that they had not been associated with the A.I.A.S.A., several students made notations on their questionnaire that they did not have the organization at their school or that they had not known about it. Of the students involved with the A.I.A.S.A., only one, representing 1.8 percent of the entire population, had been an officer.

REASONS FOR ENROLLING IN INDUSTRIAL ARTS

Determining the reasons students enrolled in industrial arts education programs at the university level was the purpose of the third section. This section asked if anyone encouraged the student to enroll in industrial arts, why the student enrolled in industrial arts, how did the student learn of the program, and did the student communicate with any member of the faculty prior to enrolling in the program.

Question number seven asked the students who had encouraged their enrollment in industrial arts. Table 6 recorded the answers to this question. A number of students gave multiple responses to this question, with the total number of responses being sixty-nine. The person that was listed the most often as encouraging the students to enroll in the industrial arts program was the high school teacher. The influence of the high school teacher was cited by 20.3 percent of the students. In addition, one student, representing 1.4 percent of the population,
TABLE 6

SOURCES OF ENCOURAGEMENT FOR ENROLLMENT
IN INDUSTRIAL ARTS

<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school teacher</td>
<td>14</td>
<td>20.3</td>
</tr>
<tr>
<td>I.A. major</td>
<td>12</td>
<td>17.4</td>
</tr>
<tr>
<td>High school counselor</td>
<td>7</td>
<td>10.1</td>
</tr>
<tr>
<td>Member of university I.A. department</td>
<td>7</td>
<td>10.1</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>31.9</td>
</tr>
<tr>
<td>No response</td>
<td>7</td>
<td>10.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses to &quot;other&quot;</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one</td>
<td>9</td>
<td>13.0</td>
</tr>
<tr>
<td>Parents</td>
<td>7</td>
<td>10.1</td>
</tr>
<tr>
<td>College counselor</td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td>Middle school teacher</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Former employer</td>
<td>1</td>
<td>1.4</td>
</tr>
</tbody>
</table>
mentioned the influence of a middle school teacher. An industrial arts major was instrumental in encouraging 17.4 percent of the students in the survey to enroll in industrial arts. The high school guidance counselor encouraged 10.1 percent of the population to enroll. The college guidance counselor was credited with encouraging 5.8 percent of the encouragement of a member of the industrial arts faculty was given as a response by 10.1 percent of the population. Persons not listed in the survey were given by 31.9 percent of the students. This group of responses by the students included 13.0 percent citing no one, 10.1 percent who were encouraged by their parents, the previously mentioned college counselors with 5.8 percent, the middle school teacher with 1.4 percent, and 1.4 percent who were encouraged by a former employer. No response was given by 10.1 percent of the population.

given by 10.1 percent of the population.

The goal of question number eight was to determine why the students enrolled in industrial arts education. This question received multiple responses, with seventy-six answers given by the students completing the survey and was recorded in Table 7. The most commonly cited factor, named by 36.8 percent of the students, was the enjoyment of high school industrial arts courses. The desire to teach was the reason of 25.0 percent of the students enrolled in the program. The benefits of teaching such as short days and summers off were indicated by 17.1 percent of the students as being the reason for becoming involved in the industrial arts education program. None of the students involved in the survey reported having enrolled in the program because they heard it was easy.
TABLE 7
REASONS FOR ENROLLING IN INDUSTRIAL ARTS

<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed I.A. in high school</td>
<td>28</td>
<td>36.8</td>
</tr>
<tr>
<td>Want to teach</td>
<td>19</td>
<td>25.0</td>
</tr>
<tr>
<td>Benefits of teaching</td>
<td>13</td>
<td>17.1</td>
</tr>
<tr>
<td>Heard it was an easy program</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>18.4</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>2.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons to &quot;other&quot;</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.A. knowledge</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td>Enjoy working with kids</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Rewarding work</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Interested in program</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Opportunities</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Needed major</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Four year degree</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Learn carpentry</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Responses not listed in the questionnaire comprised 18.4 percent of the answers given. The desire to gain the knowledge that was available through the study of industrial arts was the reason cited by 5.3 percent of the population. Four answers each received 2.6 percent of the responses. These answers included the enjoyment of working with kids, industrial arts provides rewarding work, the opportunities available in the field, and an interest in the industrial arts program. These responses included the need for a major, a desire to learn carpentry, and the fact that the program offered a four year degree. Each was cited by 1.3 percent of the population. No response was given by 2.6 percent of the students completing the survey.

Information gathered by question nine attempted to determine how the student learned about the university's industrial arts education program. This information was listed in Table 8. Some students indicated that they had learned of the program from more than one source, giving the question a total of sixty-four responses. The most common method of learning about the program was through the university career counselor, with 23.4 percent of the students giving this as an answer. Industrial arts education majors were the source of information on the program for 20.3 percent of the population. A formal recruiting program was responsible for giving 17.2 percent of the population information on the program. A member of the industrial arts faculty at the university received 9.4 percent of the total responses. Responses that were not listed in the survey were mentioned by 25.0 percent of the students. The most frequently listed response in this area was a friend, with 10.9 percent of the responses, followed by a high school teacher who received 7.8 percent of the responses. Also listed, each receiving 1.6 percent of the
<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>University career counselor</td>
<td>15</td>
<td>23.4</td>
</tr>
<tr>
<td>I.A. majors</td>
<td>13</td>
<td>20.3</td>
</tr>
<tr>
<td>Recruitment program</td>
<td>11</td>
<td>17.2</td>
</tr>
<tr>
<td>Member of university I.A. faculty</td>
<td>6</td>
<td>9.4</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>25.0</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>4.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses to &quot;other&quot;</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>7</td>
<td>10.9</td>
</tr>
<tr>
<td>High school teacher</td>
<td>5</td>
<td>7.8</td>
</tr>
<tr>
<td>Other university</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>After arrival</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>High school counselor</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Member education faculty</td>
<td>1</td>
<td>1.6</td>
</tr>
</tbody>
</table>
responses, were learning of the program after arrival at the university, from another university, from a high school counselor, and from a member of the education faculty. No response was given by 4.7 percent of the respondents.

The final question in this area, number ten, sought to determine how many of the students had communicated with the industrial arts faculty prior to enrolling in the university's program. This data was illustrated in Table 9. The majority of the students, 61.4 percent, said they had no contact with the faculty prior to their enrollment. The remaining 38.6 percent indicated that they had communicated with a member of the industrial arts faculty.

INTENTIONS AFTER GRADUATION

The goal of the final section was to determine what the students intended to do after completing their degree. This section was comprised of one question, number eleven. The responses to this question were listed in Table 10. Several of the students indicated that they were unsure of their intentions and listed the options they were considering on the questionnaire, resulting in a total of seventy-five responses to this question. The majority of the students, 41.3 percent, felt that they were interested in pursuing a career in business and industry. The second most commonly cited response, receiving 33.3 percent of the responses, was the intention to teach at the junior or senior high school level. These were the only two answers that received a substantial number of responses. Teaching in a vocational-technical school was the goal of 6.7 percent of the population. Continuing their education as a full-time graduate
<table>
<thead>
<tr>
<th>Response</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicated with faculty</td>
<td>22</td>
<td>38.6</td>
</tr>
<tr>
<td>Did not communicate with faculty</td>
<td>35</td>
<td>61.4</td>
</tr>
</tbody>
</table>
TABLE 10
CAREER INTENTIONS AFTER GRADUATION

<table>
<thead>
<tr>
<th>Plans upon graduation</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in business and industry</td>
<td>31</td>
<td>41.3</td>
</tr>
<tr>
<td>Teach junior/senior high school</td>
<td>25</td>
<td>33.3</td>
</tr>
<tr>
<td>Teach vocational-technical school</td>
<td>5</td>
<td>6.7</td>
</tr>
<tr>
<td>Continue full-time graduate work</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses to &quot;other&quot;</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Guidance counselor</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Peace Corps/missionary</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Summer business</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>
student was the intention of 5.3 percent of the students responding. Responses not listed in the survey made up 6.7 percent of the answers given to this question. Military service was the goal of 2.7 percent of the population. The remaining answers, each making up 1.3 percent of the responses, included work as a guidance counselor, Peace Corps/missionary work, and the intention to also operate a summer business in addition to teaching.

SUMMARY

In this chapter the findings of the survey were reported. The research questions stated in the first chapter were reintroduced at the beginning of this chapter. A brief summary of how the study was conducted was presented, and the four areas of the survey were distinguished. The first area in which information was gathered dealt with determining background information on the student population. Determining the past involvement of the students with industrial arts in junior and senior high school was the goal of the second area. The third section attempted to determine information related to the student's enrollment in industrial arts. The fourth and final section of this chapter dealt with the intentions of the students upon completion of their degrees.

The final chapter, Summary, Conclusions, and Recommendations, had three functions. First it summarized the study. Secondly the chapter drew conclusions from the data collected. The last section of the chapter made recommendations that would help Old Dominion University in recruiting students for the Industrial Arts Education Program.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The problem of this study was to conduct a survey of industrial arts education majors at Virginia universities to identify and analyze their reasons for enrolling in a university industrial arts education program and who had the most influence on their decision. This data would be used as an aid in recruiting students for the Industrial Arts Education Program at Old Dominion University. This chapter summarized the procedures used in the study, drew conclusions about the findings, and made recommendations that would improve the effectiveness of the recruiting effort of the Industrial Arts Education Program at Old Dominion University.

SUMMARY

The purpose of this study was to determine the reasons students enrolled in industrial arts education at the university level and who influenced their decision. Three research questions were presented that were to be answered in this study. These research questions were:

1. What were the student's reasons for enrolling in a university industrial arts education program?
2. Who had the most influence on the student's decision to enroll in an industrial arts education program at the university level?
3. What would be the most effective approaches to use in efforts to recruit students for the Industrial Arts Education Program at Old Dominion University?
To answer the research questions a survey instrument was developed and was administered to industrial arts education majors at the university level. The survey instrument asked the students questions regarding background information, prior association with industrial arts, reasons for and influences on enrollment, and intentions after graduation. The survey was sent to the five Virginia universities with industrial arts education programs: George Mason University, Norfolk State University, Old Dominion University, Virginia Polytechnic Institute and State University, and Virginia State University. At the selected universities the survey was administered to first term and freshman students in the industrial arts education program. A total of fifty-seven completed questionnaires were returned by the participating universities.

After the surveys were returned the responses to the questions were tabulated and the information gathered was reported in Chapter IV. The data gathered by the survey was analyzed and served as the basis for the conclusions and recommendations made in this chapter.

CONCLUSIONS

The results of this study showed that there were certain persons or factors that had a greater impact on the student who decided to enter an industrial arts education program at the university level. The following conclusions, based on the results of the study of the reasons for enrolling and the influences on students enrolling in industrial arts education at the university level, were formulated.

1. Half of the students (50.9%) entering the program were freshman with another quarter being transfers from community colleges. The percentage coming from a community college could have been affected by the data from
George Mason University, as that school has a program that allows the students to begin their studies at a community college and then later transfer to the university to complete their degree.

2. Although the previous majors listed by the students were greatly varied, approximately thirty percent of the students came from technically oriented majors and another twenty-five percent came from general studies programs. These two groups made up over half of the majors that were listed by students that transferred from another program.

3. While the reputation of the university was rated as the most significant reason for its selection by the students, the next two reasons were the practical considerations of the cost and the ability to commute.

4. Few of the students had prior careers but of the ones that did all were technically oriented.

5. The majority of the students enrolled in industrial arts education had taken some industrial arts courses in junior and/or senior high school.

6. Very few of the students had been involved with the American Industrial Arts Student Association while in high school. Several of the students responded to this question by writing in that they did not have, or were not aware of, the organization at their high school.

7. The high school industrial arts teacher and the industrial arts education majors were the most influential people when a student was making the decision to enroll in industrial arts education at the university level.

8. The guidance counselor, when combining the high school and college counselor, had a significant influence on the prospective industrial arts education student.
9. The enjoyment of high school industrial arts classes and closely related answers were the reasons given most often for enrolling in industrial arts education at the university level.

10. Industrial arts education majors, along with "friends", were the greatest source of information on the industrial arts education program.

11. The majority of the students that enrolled in a university industrial arts education program did not communicate with the faculty prior to enrollment.

12. More students were interested in pursuing a career in business and industry than in teaching at the junior/senior high school level. When the survey was collected it was found that the respondents from one school all indicated that they intended to seek a career in business and industry.

13. Finally, the high school experience, including the enjoyment of the courses and the influence of the teacher, had the greatest influence on the student in all phases of deciding to become an industrial arts education major.

RECOMMENDATIONS

Based on the results of this survey reported in Chapter IV, the following recommendations were submitted to improve the effectiveness of the recruiting program of the Industrial Arts Education Program at Old Dominion University.

1. An expanded effort should be made to inform students of, and recruit them for, the Industrial Arts Education Program from area high schools. This effort should enlist the aid of alumni,
students currently in the program, and members of the Industrial Arts Education faculty. Current majors should be given a significant and highly visible role in recruiting. The recruiting program for high school students should include the following points:

A. Contact local high school industrial arts teachers and make them aware of the importance of their role in recruiting potential industrial arts majors. The teachers should be encouraged to promote the idea of a career in industrial arts to their students and encourage students that have an interest in the program to seek further information from the Industrial Arts Education Program.

B. Provide high school guidance counselors with information on industrial arts education as a career. The guidance counselors should be made aware of the Industrial Arts Education Program at Old Dominion University, what it consists of, what it has to offer, and what job opportunities are available to its graduates.

C. Formation of American Industrial Arts Student Association clubs should be encouraged and promoted by the Old Dominion University Industrial Arts Education Department. The department should offer assistance in the form of speakers, demonstrations, open houses, and any other way in which it can be helpful and give exposure to the Industrial Arts Education Program.

D. Conduct high school visitation during career planning days, or any other appropriate times, and give presentations to faculty and students describing the Industrial Arts Education
Program at Old Dominion University and what a degree in Industrial Arts Education has to offer for the student.

2. The Industrial Arts Education faculty should increase the efforts to recruit students that were currently enrolled at Old Dominion University and were considering a change of major or were enrolled in a general studies program. The effort to recruit these students should be done using the members of the Industrial Arts Education faculty and students currently enrolled in the program. The use of Industrial Arts Education majors should be maximized in these recruiting efforts. The recruiting program should include the following points:

A. The significant role they play in recruiting should be stressed to the current Industrial Arts Education majors. The current majors should be encouraged to talk about their program to their friends who appear interested in the program, do not have a major, are considering a change of major, or enjoyed industrial arts in high school. If a major has a friend who appears interested in the program they should be encouraged to bring them to the Industrial Arts Program Area to tour the facilities and talk with members of the faculty and learn more about Industrial Arts Education as a major.

B. The Industrial Arts Education Faculty should contact the university guidance counselors and discuss with them what the Industrial Arts Education Program has to offer and what job opportunities are available to graduates of the program.
The fact that an Industrial Arts Education degree can lead to a career in business and industry should be pointed out to the counselors as a selling point for the program. The counselors should be asked to give special consideration to students that are enrolled in general studies programs or are considering transferring from an engineering program.

C. The members of the Industrial Arts Education faculty should assure that a member of the faculty is present during normal daytime class hours to discuss the program with any potential majors. If a member of the faculty is unavailable or not present, an appointment should be scheduled with the student at a convenient time to discuss the program.

D. The Industrial Arts Education faculty should formulate a plan to increase the visibility of the department to the student population at Old Dominion University. The methods used should include exhibits and displays on campus, coverage in the university newspaper and any other methods that are deemed appropriate.

3. The Industrial Arts Education Program should develop a plan of action to increase the enrollment of students in the program from local community colleges. The following points should be included in the plan:

A. The members of the Industrial Arts faculty should attempt to improve communications with the career counselors at local community colleges. The faculty should discuss with
the counselors what the program offers and the job opportunities available to graduates. The counselors should be urged to suggest industrial arts education to students who are enrolled in technical programs and wish to continue their education.

B. A plan should be devised that would allow the Industrial Arts Education Department to contact students enrolled in technical fields at the local community colleges and propose that they consider continuing their education at Old Dominion University and seek a degree in Industrial Arts Education.

C. An investigation should be conducted to determine the feasibility of starting a program that would allow students to begin their work on an industrial arts degree at a local community college and then transfer to Old Dominion University for the completion of their degree.
BIBLIOGRAPHY


Buchanan, Donald James, "A Projection of Student Enrollment in Industrial Arts At Old Dominion University, 1978-82," An Unpublished Study Presented To The Faculty of The School of Education At Old Dominion University, May 1978.

Carr, John F., "An Analysis of the Strategies Employed in Recruiting Industrial Arts Majors By Industrial Arts Teacher Education Institutions In The United States," An Unpublished Study Presented To The Faculty of The School of Education At Old Dominion University, April 1979.


Department of Vocational and Technical Education, Vocational And Technical Education's Response To The Discontinuance of Academic Programs at Old Dominion University, January 1982.


APPENDICES

APPENDIX A - Survey Instrument

APPENDIX B - Cover letter to participants
APPENDIX A

Survey Instrument
REASONS FOR MAJORING IN INDUSTRIAL ARTS EDUCATION

PURPOSE: This study will be used to determine your reasons for enrolling in a university Industrial Arts Education Program and who had the most influence on you in making that decision. This information will later be used to help in the recruitment of students for the Industrial Arts Education Programs at Virginia Universities.

QUESTIONS:

1. Are you a:
   ___ Freshman
   ___ Transfer from a community college
   ___ Transfer from another university
   ___ Transfer from another department within the university

2. If you are a transfer from another department, college or university what was your previous major? __________________________

3. Why did you select this university?
   ___ Cost
   ___ Ability to commute
   ___ Reputation
   ___ Accepted first
   ___ Relative is an alumni
   ___ Other (Please specify) ______________

4. Did you have a career prior to entering the university? ___ Yes ___ No
   What was your career? __________________________ For how long? ___

5. Did you take any Industrial Arts courses in grades 7-9? ___ Yes ___ No
   Grades 10-12? ___ Yes ___ No

6. Were you involved with A.I.A.S.A. in junior/senior high school?
   ___ Yes ___ No Were you an officer? ___ Yes ___ No
7. Did anyone encourage you to enroll in Industrial Arts?
   ___ High school teacher
   ___ High school guidance counselor
   ___ Industrial Arts major
   ___ Member of the university's Industrial Arts Department
   ___ Other (Please specify) ___________________________

8. Why did you enroll in Industrial Arts?
   ___ Want to teach
   ___ Enjoyed high school Industrial Arts courses
   ___ Heard it was an easy program
   ___ Want the benefits of teaching (summers off, short work day, etc.)
   ___ Other (Please specify) _________________________

9. How did you learn about the program?
   ___ Industrial Arts major
   ___ Recruitment program
   ___ University career counselor
   ___ Member of the University Industrial Arts faculty
   ___ Other (Please specify) _________________________

10. Did you visit the program or communicate with the faculty prior to
     your enrollment? ___Yes ___ No___

11. What do you intend to do after completing your degree?
   ___ Teach junior/senior high school
   ___ Teach vocational-technical school
   ___ Work in business or industry
   ___ Continue full time graduate studies
   ___ Other (Please specify) _________________________

THANK YOU
APPENDIX B

Cover Letter To Participants
Enclosed is a questionnaire for a study I am conducting dealing with the reasons a student enrolled in your Industrial Arts Education Program. The information gathered in this study will be analyzed and used to determine why a student enrolled in Industrial Arts Education and who influenced him/her in making that decision. This information, when combined with the data collected from the other four Universities with Industrial Arts Programs in Virginia, will be used to help effectively recruit students for the Industrial Arts Education Programs in the state.

Your department can help me in this study by administering this survey to all your freshmen and first term Industrial Arts Education majors. Enclosed is a stamped envelope in which to return the completed questionnaires. It would be appreciated if this information could be returned by May 20. to allow me to begin to tabulate the data.

Thank you for your help in this study.

Sincerely,

Robert O. Beuter, Jr.
Graduate Assistant

ROB/pt
Enclosures