The primary purpose was to determine the effectiveness of distributive and office education programs at the secondary level in North Carolina. The study ascertained how satisfied graduates of these two program areas were with their present jobs and how well they were performing in their jobs as perceived by their respective employers. This longitudinal study consisted of two parts: part one embraced six occupational education programs and was completed in 1972; part two was based on the same population of the 1972 study in regard to distributive and office education graduates and their employers and was completed in 1974. (Author)
ASSESSMENT OF DISTRIBUTIVE AND OFFICE EDUCATION PROGRAMS:
A MULTIVARIATE ANALYSIS OF EMPLOYEES
AND EMPLOYER SATISFACTION

by

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The purpose of this study was to analyze data pertaining to graduates of programs in distributive and office education programs in the high schools of North Carolina. In 1971, the authors received funding from the North Carolina State Advisory Council on Vocational Education to conduct a research project to assess occupational education. In 1974, the authors continued the study on an independent basis, and surveyed the same population relating to distributive and office occupations. The population responding to the 1971 phase of the study in the distributive and office occupation program areas was selected and used as the source of data for the second phase of a longitudinal study. In both phases, the major focus was on the satisfaction of graduates of high school occupational education programs with their present jobs and how well they were performing their jobs as perceived by their respective employers.

PROCEDURES FOR ASCERTAINING JOB SATISFACTION AND
JOB EFFECTIVENESS OF GRADUATES OF DISTRIBUTIVE
AND OFFICE EDUCATION PROGRAMS

The Minnesota Satisfaction Questionnaire (MSQ) was selected to measure employee job satisfaction. This instrument measures job satisfaction as viewed by the employee. For a measure of job satisfactoriness, the Minnesota Satisfactoriness Scale (MSS) was used. This instrument measures job satisfactoriness (how well people perform on the job) as viewed by the employer.
Population and Number of Responses.

From the employee (graduate) population sampled, responses were received as follows: employees in 1971 totaled 163 of which 86 were graduates of distributive education and 77 were graduates of office education; employees in 1974 totaled 58 of which 31 were graduates of distributive education and 27 were graduates of office education. From the employer population (those who employed the graduate at the time the response was requested), responses were received as follows: employers in 1971 totaled 123 of which 64 were employers of distributive education graduates and 59 were employers of office education graduates; employers in 1974 totaled 55 of which 29 were employers of distributive education graduates and 26 were employers of office education graduates.

Job Satisfaction.

The information was obtained for this section by use of the MSQ which uses the employee as the source of information. The MSQ is divided into three scales:

1. Intrinsic Satisfaction
2. Extrinsic Satisfaction
3. General Satisfaction (a combination of all items)

The three scales of the MSQ consist of the following 20 items:

<table>
<thead>
<tr>
<th>SCALE</th>
<th>ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td>1 2 3 4 7 8 9 10 11 15 16 20</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>5 6 12 13 14 19</td>
</tr>
<tr>
<td>General Satisf.</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</td>
</tr>
</tbody>
</table>
Job Satisfactoriness.

The information was obtained for this section by use of the MSS which uses the employer as the source of information. The MSS is divided into five scales: performance, conformance, dependability, personal adjustment, and general satisfactoriness.

The first four scales -- performance, conformance, dependability, and personal adjustment, are made up of different sets of items from the questionnaire.

<table>
<thead>
<tr>
<th>SCALE</th>
<th>NO. OF ITEMS</th>
<th>ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>9</td>
<td>4 5 11 12 13 14 15 16 28</td>
</tr>
<tr>
<td>Conformance</td>
<td>7</td>
<td>1 2 3 6 7 8 10</td>
</tr>
<tr>
<td>Dependability</td>
<td>4</td>
<td>17 20 21 26</td>
</tr>
<tr>
<td>Personal Adjustment</td>
<td>7</td>
<td>18 19 22 23 24 27</td>
</tr>
<tr>
<td>General Satisfactoriness</td>
<td>28</td>
<td>1 through 28</td>
</tr>
</tbody>
</table>

The performance scale is concerned with the employee's promotability, and quality and quantity of his work. The conformance scale reflects how well the worker gets along with supervisors and co-workers, and observes regulations. The dependability scale refers to the frequency of disciplinary problems created by the employee. The personal adjustment scale pertains to the worker's emotional health.
ANALYSIS OF THE DATA

Data were collected and analyzed in search of answers to the following questions regarding the employee (graduate).

1. Do differences exist on MSQ total score as well as the intrinsic and extrinsic sub-scores for any of the following factors?
   a. occupational education program area -- distributive education vs. office education.
   c. type of school, setting -- rural, suburban, and urban.
   d. sex -- male vs. female.
   e. cooperative occupational experience -- graduates of cooperative occupational education programs vs. graduates of non-cooperative occupational education programs.
   f. employment stability -- graduates working for the same company in which they were employed when in high school vs. graduates not so employed.
   g. school attendance -- post-secondary school attendance vs. no such attendance.
   h. salary -- six levels of salary and their relationship to each other: $40-$60, $61-$80, $81-$100, $101-$120, $121-$140, and $141 and over.

2. Do significant interactions exist between type of occupational education program and any of the other seven variables (b through h)?
Data were also collected and analyzed in search of answers to the following questions regarding the employer satisfactoriness (satisfaction).

1. Do differences exist on the MSS total score as well as the performance, conformance, dependability, and personal adjustment sub-scores for any of the following factors?
   a. occupational education program area — distributive education vs. office education.
   c. school setting — rural, suburban, and urban.
   d. size of the business establishment — one to ten employees, 11 - 20 employees, 21 - 50 employees, and over 50 employees.
   e. cooperative business establishments — business establishments hiring cooperative students vs. business establishments not hiring cooperative students.
   f. employment stability — graduates working for the same company in which they were employed when in high school vs. graduates not so employed.

2. Do significant interactions exist between types of occupational education programs and any of the other five variables (b through f)?

To answer the basic questions posed above, several multivariate, univariate, and two-way analyses of variance were performed. The major factor retained through all analyses was that of the occupational education.
program area (type of training). In other words, other factors such as sex and year were combined, one at a time, with the training factor. In the following sections, results of the analyses are reported.
DISCUSSION - MSQ

The following factors were not found to be significant on intrinsic, extrinsic, and total score for the MSQ (employee instrument).

1. occupational education program area
2. survey year
3. school setting
4. sex
5. post-secondary school attendance
6. salary

The above indicate that there is no difference in the satisfaction level between distributive education graduates and office education graduates.

From the findings, the following conclusions were drawn:

- There was no change in job satisfaction at the end of the three-year period, 1971-1974.
- School setting did not affect the employee's job satisfaction for graduates of both types of programs or both programs provided similar satisfaction among their respective graduates.
- Graduates who were currently enrolled in post-secondary programs did not differ in their job satisfaction level from those who were not enrolled. (It is possible that those individuals not enrolled are sufficiently satisfied that they are not seeking a new position.)
- Job satisfaction did not appear to be related to salary level. It is commonly accepted that salary is a major determinant in job satisfaction. This study in no way supports that belief.

In effect, this is probably the most significant "non-significant" finding of the study.
The following factors were found to be significant on intrinsic, extrinsic, and total score for the MSQ (employee instrument):

1. cooperative occupational experience
2. employment stability

It appears that office education students in cooperative occupational experience programs did not score as high as expected on the intrinsic sub-test; office education graduates' enrollment in cooperative programs did not affect intrinsic scores. However, for distributive education graduates, it appears that the cooperative occupational experience produces a much higher intrinsic score than non-cooperative experience. Similarly, for the total score on MSQ, it appears that the distributive education graduates who did not have cooperative occupational experiences scored lower than all other groups of graduates. Conjecture may lead one to surmise that non-cooperative office education programs are more effective than non-cooperative distributive education programs because it is easier to simulate the office experience since there is an emphasis on skill development.

Also, a higher funding level for simulation material and equipment has been maintained throughout the history of office education when compared to the distributive education funding level in the same category.

As one might expect, graduates who are still working for the same organization with which they worked while in high school, obtained higher intrinsic scores on the MSQ than those who had changed employers. This may suggest the importance of appropriate placement by the high school cooperative occupational education coordinator.
DISCUSSION - MSS

The following three factors were not found to be significant on performance, conformance, dependability, personal adjustment, and total score for the MSS (employer instrument).

1. Occupational program area
2. Size of the business establishment
3. Cooperative business establishment

Employers in small businesses do not view their employees any differently than employers in large businesses in terms of their satisfaction with the employee (graduate).

It does not appear that employers whose businesses hire cooperative students view their employees any differently than employers whose businesses do not hire cooperative students.

The following factors were found to be significant on one or more of the sub-scores or total score of the MSQ. (Sub-tests are performance, conformance, dependability, and personal adjustment).

1. Survey year
2. School setting
3. Employment stability

Analysis reveals that there is a drop in the office education total score between the years, 1971-1974. This difference is also reflected in the performance and dependability sub-scores. Speculation may lead one to conclude that office education graduates are viewed more favorably by the employers in the graduates' first year of employment as opposed to the employers' view of them three years later.

It appears that, regarding the school setting factor, employers rate office education graduates from schools located in urban settings higher on
the conformance factor than would be expected.

Employers rated their employees who were employed originally as cooperative students, while enrolled in an occupational education program, uniformly and consistently higher on all four sub-scores and the total score of the MSS than other kinds of employees.