This project surveyed evening students enrolled in the Office of Occupations Division of the Houston Community College as to their opinions concerning the effectiveness of their instructor. Of the approximately 870 students enrolled, 236 students of "professional educators" responded, and 119 students of teachers who "worked full-time in the business world" responded. A five-point opinionnaire was used for instructor ratings to determine if exceptional ratings were dependent on teachers' full-time vocational classifications. The chi-square technique was used to analyze the data with a .05 confidence level. It was found that there was no significant difference, in the opinions of the students, between the effectiveness of professional educators and those who work in the business world. (Author/DB)
A COMPARISON OF STUDENT PERCEPTIONS OF TEACHING EFFECTIVENESS BETWEEN PART-TIME OFFICE OCCUPATIONAL INSTRUCTORS WHO ARE PROFESSIONAL TEACHERS VS THOSE WHO ARE IN THE BUSINESS WORLD

by

Norma Gross

Houston Community College

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

December 1974
TABLE OF CONTENTS

STATEMENT OF PROBLEM ................................................. 1
HYPOTHESIS ................................................................. 1
BACKGROUND AND SIGNIFICANCE OF THE STUDY ...................... 2
DEFINITION OF TERMS ...................................................... 5
LIMITATIONS OF THE STUDY ............................................. 7
BASIC ASSUMPTIONS ....................................................... 8
PROCEDURES FOR COLLECTING DATA .................................. 9
OPINIONNAIRE ............................................................. 10
DISCUSSION OF RESPONSES ........................................... 11
PERCENTAGE TABLE ....................................................... 12
COMPARISON OF PERCENTAGES ........................................ 13
CHOICE OF ANALYSIS FOR RECORDING DATA ......................... 14
PROCEDURES FOR TREATING DATA .................................... 15
CONTINGENCY TABLES - OBSERVED FREQUENCIES
   EXPECTED FREQUENCIES ............................................. 16
CALCULATION OF CHI SQUARE ......................................... 17
CONCLUSION ................................................................. 18
ANALYSIS OF DATA ......................................................... 19
RECOMMENDATIONS ....................................................... 20
BIBLIOGRAPHY ............................................................. 21
STATEMENT OF THE PROBLEM

Are part-time Office Occupational instructors who are professional educators rated significantly higher by students (on a five-point opinionnaire) than teachers who work full-time in the business world?

NULL HYPOTHESIS

The ratings of part-time Office Occupational instructors are independent of their classification as a professional educator or worker in the business world.

ALTERNATIVE HYPOTHESIS

Part-time instructors' ratings are dependent on their full-time vocational classifications.
BACKGROUND AND SIGNIFICANCE OF THE STUDY

The Texas Education Agency, which approves vocational instructors in a community college, requires that teachers in the vocational department have a minimum of twenty-four months work experience outside of teaching. Therefore, some instructors are employed full-time in business while others are professional educators. Who, in the students' opinions, is a more effective teacher? This information could be helpful in selecting part-time instructors for evening classes in all community colleges.

A review of the literature revealed numerous studies involving teacher evaluation forms, procedures, and opinionnaires. But, nothing was located on a comparison of effectiveness between professional educators and those who are in the business world and teach evening classes in a community college.

The idea that "professional educators" are not the only effective teachers in a community college is borne out by a review of fifteen studies (Roueche and Hurlburt, 1968). It was found that in a Florida junior college the effectiveness of retired military personnel did not differ significantly from career teachers in administrators' opinions. They were qualified for a variety of teaching areas and in some locations accepted the purposes of the junior college better than did career teachers.

Staffing patterns have changed based on teacher rating research (Phair, 1974). A report involving ninety-nine public and eight private community colleges surveyed seven hundred and thirty-two new full-time faculty members
as to their highest degree: 10% had less than a B.A., 18% had less than a M.A. It was also found that 18% had non-teaching experience, more former elementary teachers were hired than in the previous year, 16% secondary school faculty were hired which was less than the 1972-73 year, and 31% of the new faculty came from other community colleges.

With a variety of backgrounds, education, and experience, there is an increasing need for teacher evaluation. The importance of teacher ratings is shown by a study of the faculty at St. Johns River Junior College (Overturf, 1966). Students were required to rate instructors on a scale of one to five; they were invited to supplement their ratings with written comments. The following semester, fourteen full-time instructors did not return; ten of these were in the lower half of the rating. Fifteen who rated in the lower half returned and all but one improved on the next rating. It was reported that significant improvement was made by instructors who took students' comments seriously.

While a majority of educators appear to favor evaluations, opinions differ as to the most effective technique. One researcher (Boyer, 1970), states that properly handled student evaluations provide the best criterion of quality of instruction. In direct contradiction (Medley, 1974), another study shows that teachers who were rated high by their supervisors and were well liked by pupils, were not the teachers whose students showed the greatest gain. This author points out that research does not support
Dewey's "we learn by doing" nor Skinner's "reinforcement theories." Medley stresses that "structure" should be looked for in measuring teacher effectiveness.

There are, of course, variables which must be taken into consideration in a study investigating student points of view. With three hundred randomly selected students from four hundred and two classes in five colleges, different points of view were found for student ratings of course examinations, textbooks, and class discussions. These views were moderately related to student characteristics such as grades and sex.

A summary statement can be taken from an article in the *Junior College Research Review* (Boyer, 1970) which states that "instructor evaluation must be an integral part of the overall development plan of the college."

By surveying effective teacher characteristics, staffing guidelines can be established by community colleges to assist in securing instructors who will benefit students and compliment the institution.
DEFINITION OF TERMS

DEPENDENT VARIABLE - full-time occupation of part-time instructors.

EVENING CLASSES/SCHOOL - classes held between 5:30 and 10:00 p.m.

INDEPENDENT VARIABLE - teacher ratings and their full-time occupational classification.

OPINIONNAIRE - instrument constructed for teacher rating on a scale from one to five with one being the most effective.

PART-TIME OFFICE OCCUPATIONAL INSTRUCTOR - a teacher who is paid by the hour for instructing classes between 5:30 and 10:00 p.m.

POPULATION - students enrolled in evening classes, Office Occupations Division, of the Houston Community College during the Fall Semester, 1974.

PROFESSIONAL TEACHERS/EDUCATORS - part-time instructors with the community college who are employed as full-time teachers by a school district.

SAMPLE - all students attending class on the night opinionnaire administered, October 14 - 23, 1974.

STUDENTS - the sample consisted of individuals registered for evening courses in the Office Occupations Division of the Houston Community College. The total student population in the Fall, 1974, was 17,254; approximately 870 were in the
Office Occupations Division.  (This is calculated by using
an average of 20 students in the 39 classes.)

TEACHERS IN THE BUSINESS WORLD - part-time instructors with the
community college who are employed full-time in the
business world.
LIMITATIONS OF THE STUDY

Students surveyed were enrolled in one department of the Houston Community College - the Office Occupations Education Division.

This survey was administered the sixth and seventh week of class; individuals who were still enrolled responded. It is possible that the ones who had continued the class were those who felt the instructor was effective.

Opinions may be biased depending on the personality of the individual teacher and his ability to establish a rapport with students. While the questionnaire asked for an "effective" teacher rating, personal feelings may have influenced a choice.

The validity of opinions must always be questioned. The average person is inconsistent and can be influenced by a variety of factors. Those which could have affected this study include: home and/or working conditions, success in the classroom, personal health, and environment on the particular day opinionnaire was administered.
BASIC ASSUMPTIONS

This survey took place in the Fall Semester. Though weather conditions are more favorable at this time of year, and students are generally in better frames of mind, it is assumed they would respond in a similar manner regardless of the season.

The assumption is made that the "opinionnaire" which was constructed and administered was valid and reliable.

In marking the opinionnaire, it is further assumed that participants recorded their true convictions and were not influenced by personal feelings toward an instructor.

The project concerns "student perceptions of teaching effectiveness"; the assumption is made that students are able to rate effectiveness of their instructor.
**PROCEDURES FOR COLLECTING DATA**

The Office Occupations Education Department of the Houston Community College had thirty-nine part-time instructors for the evening school in the Fall of 1974; twenty-one were professional educators and eighteen were employed full-time in the business world.

With a multi-campus, a schedule was worked out to visit the classes between October 14 and October 23, 1974:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, October 14</td>
<td>Houston Technical Institute Sharpstown Campus</td>
<td>M-W classes</td>
</tr>
<tr>
<td>Tuesday, October 15</td>
<td>Houston Technical Institute Bellaire Campus</td>
<td>T-T classes</td>
</tr>
<tr>
<td>Wednesday, October 16</td>
<td>Waltrip Campus</td>
<td>M-W classes</td>
</tr>
<tr>
<td>Thursday, October 17</td>
<td>Westbury Campus</td>
<td>Th. only classes</td>
</tr>
<tr>
<td>Monday, October 21</td>
<td>Westbury Campus</td>
<td>M-W classes</td>
</tr>
<tr>
<td>Tuesday, October 22</td>
<td>Sharpstown Campus</td>
<td>T-T classes</td>
</tr>
<tr>
<td>Wednesday, October 23</td>
<td>Bellaire Campus</td>
<td>M-W classes</td>
</tr>
</tbody>
</table>

An opinionnaire (shown on page 10) was produced and administered to the students in thirty-nine evening classes. The survey sheets were introduced to students, distributed, and collected by a supervisor. It was emphasized that a specific teacher was NOT being evaluated and neither names nor classes were being recorded.
OPINIONNAIRE

I. Please circle A or B

My instructor is:  
A. A Professional Educator  
B. Works Full-Time in the Business World

II. Please circle one of the following statements to indicate your opinion as to teacher effectiveness. Do not be influenced as to your feelings toward the individual. Consider only this question -- Do you feel this instructor is an EFFECTIVE TEACHER?

1. Exceptional
2. Above Average
3. Average
4. Below Average
5. Inadequate
DISCUSSION OF RESPONSES

Responses to the Opinionnaire were divided as to (A) professional educators and (B) those working full-time in the business world. These two classifications were further divided according to the rating each received; one through five with one being "exceptional." A Percentage Table is shown on page 12 which reflects responses by the three hundred and fifty-five students involved in the survey.

Percentage-wise, the professional educators received more "exceptional" ratings than did instructors who work full-time in the business world; 53.8 compared to 39.5 per cent. "Above average" scores were marked for 26.7 per cent of the professional educators and 35.3 per cent of instructors working full-time in business. An "average" rating was shown as 16.9 per cent for the professional educators and 20.2 per cent for those in business. The "below average" markings were 1.7 per cent for the professional educators and 4.2 per cent for full-time business instructors.

It was interesting to note that both groups of teachers received scores reflecting that students felt their teaching effectiveness was "inadequate"; .9 per cent for the professional educators and .8 per cent for instructors working full-time in the business world.

A table on page 13 is a Comparison of Percentages for the (A) professional educator and (B) instructor working full-time in business.
PERCENTAGE TABLE

A

Responses by students whose instructor is "A Professional Educator"

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exceptional</td>
<td>127</td>
<td>53.8%</td>
</tr>
<tr>
<td>2. Above Average</td>
<td>63</td>
<td>26.7%</td>
</tr>
<tr>
<td>3. Average</td>
<td>40</td>
<td>16.9%</td>
</tr>
<tr>
<td>4. Below Average</td>
<td>4</td>
<td>1.7%</td>
</tr>
<tr>
<td>5. Inadequate</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

B

Responses by students whose instructor "Works Full-Time in the Business World"

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exceptional</td>
<td>47</td>
<td>39.5%</td>
</tr>
<tr>
<td>2. Above Average</td>
<td>42</td>
<td>35.3%</td>
</tr>
<tr>
<td>3. Average</td>
<td>24</td>
<td>20.2%</td>
</tr>
<tr>
<td>4. Below Average</td>
<td>5</td>
<td>4.2%</td>
</tr>
<tr>
<td>5. Inadequate</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Total Students 355
### COMPARISON OF PERCENTAGES

<table>
<thead>
<tr>
<th></th>
<th>Professional Educator</th>
<th>Instructor Working Full-Time in Business</th>
<th>Per Cent Favoring A or B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional</td>
<td>53.8%</td>
<td>39.5%</td>
<td>14.3% A</td>
</tr>
<tr>
<td>Above Average</td>
<td>26.7%</td>
<td>35.3%</td>
<td>8.6% B</td>
</tr>
<tr>
<td>Average</td>
<td>16.9%</td>
<td>20.2%</td>
<td>3.3% B</td>
</tr>
<tr>
<td>Below Average</td>
<td>1.7%</td>
<td>4.2%</td>
<td>2.5% B</td>
</tr>
<tr>
<td>Inadequate</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.1% A</td>
</tr>
</tbody>
</table>
CHOICE OF ANALYSIS FOR RECORDING DATA

Selection of the type analysis to be used was determined by the results desired from this survey - a test of independence - is there a relation between the effectiveness of office occupational instructors and their full-time vocational classification as a "professional educator" or "employee in the business world."

The instrument constructed to gain student opinion showed results in non-parametric, ordinal, rank form. Therefore the Procedures for Treating Data (page 15) are shown in a Chi Square analysis.

A margin of error was set at .05 for a confidence level. Observed Frequencies (page 16) are shown on a table with two rows and five columns; this is calculated to allow four degrees of freedom. Referring to a table for critical value of a one-tailed test at the .05 level of significance with four degrees of freedom, it is found that the critical value of $X^2$ is 7.78.

Expected responses, assuming independence of classification for instructors' full-time occupations are shown on page 16. These figures were used for Calculation of Chi Square (page 17) with a resultant $X^2$ of 7.72.
PROCEDURES FOR TREATING DATA

Chi Square ( $X^2$ )

Null Hypothesis ( $H_0$ ) : The ratings of part-time Office Occupational instructors are independent of their classification as a professional educator or worker in the business world.

Alternative Hypothesis ( $H_A$ ) : Part-time instructors' ratings are dependent on their full-time vocational classifications.

Level of Significance: $a = .05$

Degrees of Freedom: $df = (r-1)(c-1)$

$df = (2-1)(5-1)$

$df = (1)(4)$

$df = 4$

Critical Value of $X^2$: 7.78

Conclusions: If the calculated value of $X^2$ is more than the critical value of $X^2$, the null hypothesis will be rejected and the alternative hypotheses accepted.
### CONTINGENCY TABLE OF OBSERVED FREQUENCIES

Responses to Opinionnaire

\[ f_o \]

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>127</td>
<td>63</td>
<td>40</td>
<td>4</td>
<td>2</td>
<td>236</td>
</tr>
<tr>
<td>B</td>
<td>47</td>
<td>42</td>
<td>24</td>
<td>5</td>
<td>1</td>
<td>119</td>
</tr>
<tr>
<td>Totals</td>
<td>174</td>
<td>105</td>
<td>64</td>
<td>9</td>
<td>3</td>
<td>355</td>
</tr>
</tbody>
</table>

### CONTINGENCY TABLE OF EXPECTED FREQUENCIES

Expected Responses Assuming Independence of Classification

\[ f_e \]

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>115.67</td>
<td>69.80</td>
<td>42.55</td>
<td>5.99</td>
<td>1.99</td>
<td>236.00</td>
</tr>
<tr>
<td>B</td>
<td>58.33</td>
<td>35.20</td>
<td>21.45</td>
<td>3.01</td>
<td>1.01</td>
<td>119.00</td>
</tr>
<tr>
<td>Totals</td>
<td>174.00</td>
<td>105.00</td>
<td>64.00</td>
<td>9.00</td>
<td>3.00</td>
<td>355.00</td>
</tr>
</tbody>
</table>
### CALCULATION OF CHI SQUARE

<table>
<thead>
<tr>
<th>$f_o$</th>
<th>$f_e$</th>
<th>$f_o - f_e$</th>
<th>$(f_o - f_e)^2$</th>
<th>$(f_o - f_e)^2 / f_e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>127</td>
<td>115.67</td>
<td>11.33</td>
<td>128.3689</td>
<td>1.1098</td>
</tr>
<tr>
<td>47</td>
<td>58.33</td>
<td>-11.33</td>
<td>128.3689</td>
<td>2.2007</td>
</tr>
<tr>
<td>63</td>
<td>69.80</td>
<td>-6.80</td>
<td>46.2400</td>
<td>0.6625</td>
</tr>
<tr>
<td>42</td>
<td>35.20</td>
<td>6.80</td>
<td>46.2400</td>
<td>1.3136</td>
</tr>
<tr>
<td>40</td>
<td>42.55</td>
<td>-2.55</td>
<td>6.5025</td>
<td>0.1528</td>
</tr>
<tr>
<td>24</td>
<td>21.45</td>
<td>2.55</td>
<td>6.5025</td>
<td>0.3031</td>
</tr>
<tr>
<td>4</td>
<td>5.99</td>
<td>-1.99</td>
<td>3.9601</td>
<td>0.6611</td>
</tr>
<tr>
<td>5</td>
<td>3.01</td>
<td>1.99</td>
<td>3.9601</td>
<td>1.3156</td>
</tr>
<tr>
<td>2</td>
<td>1.99</td>
<td>.01</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
<tr>
<td>1</td>
<td>1.01</td>
<td>-.01</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

$x^2 = 7.7194$
CONCLUSION

The critical value of $X^2$ for four degrees of freedom at .05 level of significance is 7.78. The calculated value of $X^2$ is 7.72.

Since the calculated value of $X^2$ does not exceed the critical value, the null hypothesis cannot be rejected; the ratings of part-time Office Occupational instructors are independent on their classification as a professional educator or worker in the business world.
ANALYSIS OF DATA

When comparing results from the opinionnaire, it was found that evening instructors who are professional educators scored 14.3 per cent more than did the teachers who work full-time in business as being "exceptional" in their teaching effectiveness. This can be misleading unless the second category, "above average," is taken into consideration. Combining these two top ratings shows that professional educators score 5.7 per cent more. When adding the three categories, average and above, it is found that the professional educator has a lead of 2.4 per cent.

Using Chi Square for an analysis of the data at .05 level of significance, results show that the ratings of part-time Office Occupational instructors are independent of their classification as a professional educator or worker in the business world. Therefore we can assume, from the results of this evaluation, that evening teachers who have had experience in business will be as effective in the classroom as are those who have earned a teaching certificate and are employed as full-time instructors.

Teachers from both categories of this survey received "inadequate" ratings. While it is unrealistic to feel that the needs of all students can be met, their expressed discontent justifies the need for continual teacher evaluation.
RECOMMENDATIONS

This report, copies provided for the Personnel Department and all Division Chairmen of the Houston Community College, should be considered by those who employ part-time instructors.

The selection of evening teachers should not give preference to individuals who work full-time in the teaching profession.

Supervisors need not feel that it is necessary to spend additional time with instructors who are not professional educators.

A teacher evaluation should take place each semester in order to recognize instructors who are "inadequate" in the opinions of students.
BIBLIOGRAPHY


