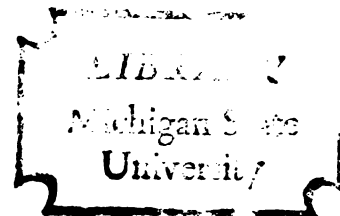


AN ASSESSMENT OF SELECTED  
ATTITUDINAL CHANGES IN  
SECONDARY VOCATIONAL TEACHERS

Thesis for the Degree of Ph. D.  
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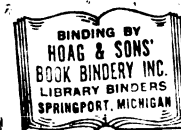
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## ABSTRACT

### AN ASSESSMENT OF SELECTED ATTITUDINAL CHANGES IN SECONDARY VOCATIONAL TEACHERS

by

Marie Carol Schrag

A current issue in education concerns the attitudes which enhance effective teaching. How can beginning teachers be assisted in their role adjustment and in the development of attitudes which will lead to teaching success? Role adjustment is frequently compounded in vocational education where many new teachers lack college degrees and formal teacher training. The answer may partly lie in induction programs.

The purpose of this study was to examine: (1) changes in confidence for teaching; (2) changes in open-mindedness; (3) the relationship of years of teaching experience, level of education and number of education courses taken to these factors; and (4) the relationship of the changes that occurred to the varying lengths of the orientation programs.

The teachers at three new Michigan Area Vocational Centers which opened Fall, 1971, participated in the investigation. The Confidence Level Inventory for Teaching and the Rokeach Dogmatism Scale were administered to the teachers three times: on their first day of work; after teaching three weeks; and after teaching six weeks.

The Centers had varying orientation program lengths of twenty-two, twelve and seven days. Test scores on the two instruments were analyzed for variances among the three teacher groups and the three time periods. Background information was gathered on the first day of employment and compared to test scores obtained at the same time for the entire group of vocational education teachers.

Within the limitations of the study, the following conclusions seem reasonable based on the findings:

1. Vocational education teachers will become more open-minded through orientation and classroom teaching. The total sample displayed a significant change in open-mindedness during the time periods addressed in the study.
2. Vocational education teachers vary considerably in their confidence for teaching. A significant difference existed in the confidence for teaching test scores among the three teacher groups irrespective of time. These differences among groups could be explained by varying school policies and practices in areas such as: teacher selection criteria; program offerings; and the atmosphere created by job interviews plus the first orientation day.
3. Vocational education teachers do not significantly alter their confidence for teaching in the short run. A significant difference did not exist in the confidence for teaching test scores among the three teacher groups when the interaction of the three time periods was considered.
4. The data does not support the notion that the length of orientation for vocational education teachers affects their open-mindedness and confidence for teaching.

5. Open-mindedness of vocational education teachers is positively related to years of teaching experience, educational level, number of education courses taken, and confidence for teaching.
6. Confidence for teaching of vocational education teachers is positively related to years of teaching experience. However, confidence for teaching does not have a significant relationship to the educational level or the number of education courses taken.

The investigation of confidence for teaching and open-mindedness offers a new dimension to vocational education research. The findings of this study suggest possible interpretations of confidence for teaching, open-mindedness, and background information in relation to teacher role adjustment, length of induction programs and hiring practices.

AN ASSESSMENT OF SELECTED ATTITUDINAL CHANGES  
IN SECONDARY VOCATIONAL TEACHERS

By  
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## CHAPTER I

### OVERVIEW OF THE PROBLEM

#### Introduction

A current issue in education concerns the attitudes which enhance effective teaching. How can beginning teachers be assisted in their role adjustment and in the development of attitudes which will lead to teaching success? The answer may lie in preservice and in-service education. Role adjustment is frequently compounded in vocational education where many new teachers lack college degrees and formal teacher training. Therefore, induction programs become of paramount importance in vocational teacher role adjustment.

#### The Problem

The purpose of this study was to examine: (1) changes in confidence for teaching; (2) changes in open-mindedness; (3) the relationship of selected background data to these factors; and (4) the relationship of the changes that occurred to the length of the induction program at three Michigan Area Vocational Centers.

### Need for the Study

Studies have shown that the attitudes of teachers have very powerful impacts upon student educational achievement.<sup>1</sup> In addition teacher characteristics have been deemed important. The Coleman report stated that teacher characteristics accounted for a higher proportion of variation in student achievement than did all other aspects of the school combined.<sup>2</sup>

The two attitudes (confidence for teaching and open-mindedness) investigated in the present study have been identified as particularly important in the teaching field. Many writings address themselves to the self-concept and the importance of self-confidence. According to Bowers and Soar, successful teaching requires the teacher to be well enough adjusted that much of his energy is not expended in dealing with his own intrapersonal tensions. He must be able to perceive himself and others clearly and represent himself honestly in communication with others.<sup>3</sup> Other authors discuss the relevancy of open-mindedness. Rokeach described openness to change as one of the essential personality characteristics of beginning teachers. If desirable teacher behavior change is to take place, the teacher must have an attitude which is open

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<sup>1</sup>Report of the National Advisory Commission of Civil Disorders (New York: Bentam Books, 1968), p. 429.

<sup>2</sup>James S. Coleman, et al., Equality of Educational Opportunity (Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, 1966), p. 12.

<sup>3</sup>Norman D. Bowers and Robert S. Soar, "The Influence of Teacher Personality on Classroom Interaction," Journal of Experimental Education, XXX (June, 1962), p. 311.



beginner--and given the time and assistance he needs to develop his own teaching style.<sup>6</sup>

### Questions to be Answered

How confident is a teacher on the job's first day? What changes in the level of confidence occur during the first few months? How open-minded is a teacher on the job's first day? What changes in the the level of open-mindedness occur during the first few months? Several studies have related confidence to teaching success. For example, Tyler found that confidence scores differentiated between successful and unsuccessful student teachers.<sup>7</sup> Therefore, assessing changes in the confidence level becomes extremely important. To a great extent, effective teaching is a process of sharing one's self with others. Inadequate personalities find this very difficult to do. The ability to involve and to share one's self with others in highly dependent upon the individual's own feelings of personal adequacy. To set an example, a teacher must show that he possesses the courage to look at himself and his beliefs without being defensive. In addition to a feeling of adequacy, behavior will be a function of much more specific concepts held about himself as a teacher.

Does a longer induction program assist teachers in these aspects of their role adjustment. In other words, is there any

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<sup>6</sup>National Commission of Teacher Education and Professional Standards, The Real World of the Beginning Teacher (Washington, D.C.: National Education Association, 1965), p. 7.

<sup>7</sup>Fred T. Tyler, "The Prediction of Student Teaching Success From Personality Inventories," University of California Publications in Education, XI (1954), p. 312.

to change. Rokeach referred to this personality dimension as the relative openness or closedness of a person's belief system.<sup>4</sup>

Role adjustment for the beginning teacher is often greater than anticipated. Allen and Ryan described it in the following manner:

The initial teaching experience is a disappointment, if not a disaster. Myriad problems they only vaguely anticipated become searing realities. They did not realize teaching would be so complex. They had not anticipated they would have to be doing so many things at once. They have a hard time finding the proper level of communication to use with students. They have difficulty planning and translating plans into classroom activities.<sup>5</sup> They don't know why things went right or wrong.

Allen and Ryan depict their version of the typical beginning teacher who has completed a college program in education. The situation is compounded for many vocational teachers. Frequently, they come into teaching directly from business and industry without education courses and/or college degrees.

With the projected rapid growth of vocational education, the problem of developing meaningful induction programs becomes increasingly important. The National Commission of Teacher Education and Professional Standards states:

Induction to teaching must be dealt with as a pertinent stage in career development. A new teacher should not be left to the isolation of his own classroom to succeed or fail depending on his ability, ingenuity, and resilience. He should be treated for what he is -- a

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<sup>4</sup>Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960), p. 395.

<sup>5</sup>Dwight Allan and Kevin Ryan, Microteaching (Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1969), p. 10.

relationship between the length of the induction program and the degree of change in teacher confidence and open-mindedness? If the length of the induction program is related to changes in confidence and open-mindedness, then Group I (Center I teachers) with twenty-two days of induction should incur a significantly greater positive change in confidence and open-mindedness than Groups II and III with twelve and seven induction days respectively. Other questions to be answered and relationships to be analyzed are: What relationship exists between a teacher's confidence level for teaching on the first day of employment and selected background information, i.e., years of teaching experience, number of education courses taken, and level of education. What relationship exists between open-mindedness on the first day of employment and selected background factors? Ryans reiterates:

Personnel decisions are constantly being made by teacher education institutions in admitting students and by school boards and administrators in selecting and promoting teachers but there is little agreement about the relative importance of qualifications such as intelligence, formal education, pedagogical training, interests and various personal and social characteristics.<sup>9</sup>

### Hypotheses

The study was designed to test nine hypotheses:

Hypothesis I:           Group I will show a greater positive change in expressed confidence level for teaching than Groups II and III.

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<sup>9</sup>D. G. Ryans, Characteristics of Teachers (Washington, D.C.: American Council of Education, 1960), p. 370.

- Hypothesis II: Group I will show a greater positive change in open-mindedness than Groups II and III.
- Hypothesis III: There is a positive relationship between the expressed confidence level for teaching and open-mindedness.
- Hypothesis IV: There is a positive relationship between the expressed confidence level for teaching and the number of years of prior teaching experience.
- Hypothesis V: There is a positive relationship between the expressed confidence level for teaching and the number of professional education courses completed.
- Hypothesis VI: There is a positive relationship between the expressed confidence level for teaching and the level of education.
- Hypothesis VII: There is a positive relationship between the open-mindedness and the number of years of prior teaching experience.
- Hypothesis VIII: There is a positive relationship between the open-mindedness and the number of professional education courses completed.
- Hypothesis IX: There is a positive relationship between the open-mindedness and the level of education.

#### Definition of Terms

Area Vocational Center - a building or complex of buildings designated by the Michigan State Board of Education to be used expressly

for providing vocational education programs. High school students attend part-time sent from several school districts.

Attitude - A predisposition to react in a certain way; a readiness to react; a determining tendency.

Confidence - A positive self-concept; a belief in one's own abilities; a reliance on one's own powers.

Dogmatism - The degree of openness or closedness in a person's systems of belief and disbelief.

Induction Program - An orientation and/or professional education program at the advent of a teacher's employment at a particular school.

Self-perception - A personal reflection, reaction or expression of an individual regarding his attitudes, interests, beliefs, needs, motives, and actions.

Vocational Education - Education designed to develop specific skills, abilities, understanding, attitudes, work habits and appreciations, encompassing specialized knowledge and information needed by youth and adults to enter and make progress in employment on a useful and productive basis. The term excludes education designed to prepare persons for occupations generally considered professional or which require a baccalaureate or higher degree. The term also excludes education which is intended for all students and is commonly known as General Education.

#### Delimitations

1. No attempt was made to assess the teaching effectiveness of teachers participating in the study.

2. The study investigated only two aspects of role adjustment; i.e., confidence for teaching and open-mindedness.
3. Only the length of the induction program was considered; not the quality of the program.

### Limitations

1. Data are valid to the extent that teachers responded seriously and honestly concerning their attitudes and backgrounds. It is assumed that attitudes and beliefs can be accurately reported and that paper-pencil inventories can be used to validly assess them.
2. The collection of data was limited to new Area Vocational Centers in Michigan which opened fall, 1971. However, there is no reason to believe that this population is substantively different than similarly selected vocational education teacher populations. Correspondingly, it is believed that the findings of the present study could be generalized to other vocational education teacher populations.
3. Since the entire faculty at three Centers were included in the study, there was no control over the possibility of varying background characteristics within or among the three groups.

### Study Procedure

1. A review of literature was conducted in the areas of confidence for teaching; teacher open-mindedness; attitudes and teacher background; and attitudinal changes in beginning and student teachers.

2. Standardized instruments were examined and two were selected to measure confidence for teaching and open-mindedness.
3. Level of education, number of education courses taken and years of teaching experience were selected as background information to be gathered from participants and utilized as independent variables.
4. Instruments were administered to the faculty at three new Area Vocational Centers in Michigan by their principals on the teachers' first day of work. Background data were gathered from participants at the same time. Post-tests were administered after teaching durations of three and six weeks.
5. The resulting data were tabulated, analyzed and interpreted.
6. Conclusions and recommendations were drawn.

### Overview of Chapters

Chapter II provides a review of related research in the area of: confidence for teaching; teacher open-mindedness; attitudes of teacher background; attitudinal changes in beginning and student teachers; and attitudinal changes during orientation and in-service programs.

Chapter III discusses the procedures utilized in the investigation by examining: selection of the study population; description of the study population; instrumentation (Rokeach Dogmatism Scale and Confidence Level Inventory for Teaching); and collection of data.

In Chapter IV derived statistics for testing the hypotheses are presented and a summary made of the results.

The final chapter includes: a ~~summary~~ of the investigation; conclusions; ~~implications~~; and ~~recomm~~endations for further research.



## CHAPTER II

### REVIEW OF RELATED RESEARCH

The related research is presented in five categories; (1) self-concept and confidence for teaching; (2) belief systems and teacher open-mindedness; (3) attitudes as they relate to various teacher background aspects used in this study, i.e., educational level, years of teaching experience, and education courses; (4) attitudinal changes of beginning teachers and student teachers; and (5) attitudinal changes during orientation and in-service programs.

#### Confidence for Teaching

Some of the research literature investigated concerned the relationship of instructors' self-concepts to successful teaching. Many writers have found that a significant positive correlation exists between the two. One example is Good's<sup>1</sup> study analyzing self-perceptions of effective and ineffective teachers. He concluded that: (1) effective teachers are more confident of themselves; (2) effective teachers have a relatively low anxiety level; and (3) the self-concept

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<sup>1</sup> Ronald G. Good, "An Analysis of the Self-Perceptions and Other Selected Characteristics of Effective and Ineffective Teachers: A Study Based on the Educational Philosophy of the Fifty-Year Program in Teacher Education at the University of North Carolina" (Unpublished Ph.D. dissertation, University of North Carolina), Dissertation Abstracts, XXIX, 1969, p. 4373A.

and self-perceived needs of an individual are the most fruitful areas of research for determining correlates of teaching effectiveness. In a similar investigation, Gates<sup>2</sup> affirmed that effective elementary teachers have a more positive attitude toward teaching than secondary ones.

Self-concept scores measured by the Tennessee Self-Concept Scale were compared to supervisor ratings of student teachers by Garvey.<sup>3</sup> She found a positive correlation between the two, concluding that success in student teaching is affected, but not necessarily determined by a positive view of oneself, lack of confusion in self-perception, and good adjustment. Tyler's<sup>4</sup> results also suggest that confidence for teaching scores differentiate between successful and unsuccessful student teachers.

In 1960 Combs<sup>5</sup> began five years of research at the University of Florida to assess the perceptions of effective teachers, counselors and Episcopal priests. The following major areas were determined to be crucial in the perceptual organization of a good teacher: (1) rich, extensive, and available perceptions about the subject field; (2) accurate perceptions about what people are like; (3) perceptions of

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<sup>2</sup>Carl J. Gates, "A Study of Attitude, Need, and Personality Trait Correlates of Effective Teaching in Three Selected School Systems" (Unpublished Ed.D. dissertation, University of Southern Mississippi), Dissertation Abstracts, XXIX, 1969, p. 3021A.

<sup>3</sup>Reba Garvey, "Self-Concept and Success in Student Teaching," Journal of Teacher Education, XXI (Fall, 1970), 360.

<sup>4</sup>Fred T. Tyler, "The Prediction of Student Teaching Success From Personality Inventories," University of California Publications in Education, XI, 1954, pp. 233-34.

<sup>5</sup>Arthur W. Combs, The Professional Education of Teachers (Boston: Allyn and Bacon, Inc. 1965), p. 20.

self leading to adequacy; (4) accurate perceptions about the purpose and process of learning; and (5) personal perceptions about appropriate methods for carrying out these purposes. Combs<sup>6</sup> deduced that good teachers are deeply committed to their points of view because personal involvement is essential if a point of view is to have any significant effect upon behavior. Riddle<sup>7</sup> examined intern teachers' role adjustment, finding that their self-perceptions as teachers constituted a major factor in differentiating high and low clarity scores. High scorers lacked conceptions of themselves as teachers. Generally, the latter group had a difficult role adjustment and significantly lower role performance ratings.

Most studies assessing changes in teachers' self-concepts involved student teachers. Dumas<sup>8</sup> analyzed the direction and magnitude of changes in student teacher self-perceptions by using the Fiedler Interpersonal Scale. Seventy-one per cent of the subjects improved their self-perceptions during a one semester experience in public school classrooms while twenty-seven per cent viewed themselves with less favor and two per cent showed no change. Dumas also found that those student teachers who worked with a "slow learners" section tended to have a positive self-concept change. Lantz's<sup>9</sup> research disclosed similar

<sup>6</sup>Ibid., p. 29.

<sup>7</sup>Dorothy D. M. Riddle, "Intern Teachers' Experienced Anticipatory Socialization and Subsequent Role Adjustment" (Unpublished Ed.D. dissertation, State University of New York at Buffalo), Dissertation Abstracts, XXX, 1969, p. 1055A.

<sup>8</sup>Wayne Dumas, "Factors Associated With Self-Concept Change in Student Teacher," Journal of Educational Research, LXII (February, 1969), 275.

<sup>9</sup>Donald Lantz, "Change in Student Teachers' Concepts of Self and Others," Journal of Teacher Education, XV (June, 1964), 203.

changes. He concluded that in order for prospective teachers to maximize the development of a positive self-concept they should be placed in non-threatening situations.

Respondents ranked their competence in twenty-five teaching techniques before and after student teaching in research conducted by Hoover, Kaiser, and Podolich.<sup>10</sup> Significant increases in teaching confidence were evident in such categories as: conducting classroom discussions; stating behavioral objectives; constructing tests; managing behavior; and directing study activities. A decrease in confidence was exhibited in: utilizing instructional resources; conducting panel discussions; role playing; and supervising clubs.

Two doctoral studies measured changes in student teachers' confidence for teaching using the Confidence Level Inventory for Teaching (CLIT). Czajkowski<sup>11</sup> found substantial average increases in confidence for teaching during the internship period. He also determined that scores were positively related to performance ratings. However, Czajkowski found no change in attitudes toward teaching and students as measured by the Minnesota Teacher Attitude Inventory (MTAI). Similarly Smith's<sup>12</sup> elementary music teachers expressed significantly positive changes in

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<sup>10</sup>Kenneth H. Hoover, L. H. Kaiser, and William F. Podolich, Jr., "A Comparison of Expressed Teaching Strengths Before and After Student Teaching," Journal of Teacher Education, XVI (September, 1965), 324.

<sup>11</sup>Theodore J. Czajkowski, "Relationship of Confidence for Teaching to Selected Personal Characteristics and Performance of Student Teachers" (Unpublished Ed.D. dissertation, Michigan State University, 1968), 92-3.

<sup>12</sup>Martha L. Smith, "A Study of Elementary Student Teacher Confidence in and Attitudes Towards Music and Changes That Occur in a Student Teaching Experience" (Unpublished Ph.D. dissertation, Michigan State University, 1969), 155.

confidence for teaching with an increase in mean CLIT scores from 168.86 to 186.34. However, negative changes occurred in attitudes toward teaching and pupils as rated by the MTAI.

### Teacher Open-Mindedness

The Dogmatism Scale was developed and utilized in research by Rokeach.<sup>13</sup> Two generalizations supported by his investigations are particularly relevant to this study: (1) relatively closed-minded persons are less willing to entertain something unconventional or new, and (2) relatively open- and closed-minded persons consistently differ in their ability to form new belief systems, whether these systems are conceptual, perceptual or aesthetic in nature.<sup>14</sup> Brown<sup>15</sup> has shown that beliefs have a powerful influence on behavior. Instructor philosophical beliefs pertaining to the nature of man, reality, knowledge, values, and ethics were the strongest ones.

According to Freehill's<sup>16</sup> conclusions, the best predictor of teaching quality is a scale measuring democratic attitudes. These findings contradict Lewis's<sup>17</sup> when he examined the relationship between

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<sup>13</sup>Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960), 284.

<sup>14</sup>Ibid., p. 397.

<sup>15</sup>Robert B. Brown, "Experimentalism in Teaching Practice," Journal of Research and Development in Education, IV (Fall, 1970), 73.

<sup>16</sup>Maurice F. Freehill, "The Prediction of Teaching Competency," Journal of Experimental Education, XXXI (March, 1963), 311.

<sup>17</sup>Franklin G. Lewis, "The Relationship of Authoritarianism as Revealed by the Rokeach Dogmatism Scale and Perceived Effectiveness of Teaching as Indicated by Teachers' Self-Ratings, Principals' Ratings and Supervisors' Ratings" (Unpublished Ed.D. dissertation, North Texas State University), Dissertation Abstracts, XXIX, 1968, p. 1682A.

open- and closed-mindedness of teachers and the perceived effectiveness of teaching. In general, Lewis found the level of dogmatism was not related to self-ratings of teacher effectiveness. However, principals and supervisors tended to give higher ratings to more dogmatic teachers.

Various other studies have demonstrated that personality aspects are interrelated. Korn and Giddan,<sup>18</sup> utilizing three different scales, revealed that the more dogmatic an individual is, the less tolerant, flexible, and secure he is. Burke<sup>19</sup> found a relationship between dogmatism and ratings of interpersonal sensitivity. Saltzman<sup>20</sup> asserted that the degree to which a person is perceived as being empathetic and positive in his regard for others is a function of his level of dogmatism.

Research has shown that effective rapport with students is typical of an open-minded teacher while a dogmatic one tends to dominate. Leeds<sup>21</sup> reported a significantly negative relationship between rapport ratings and high authoritarian scores for teachers. McGee<sup>22</sup> substantiated Leeds's findings. He found that dogmatism scores correlated .58 with authoritarian teacher behavior in the classroom.

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<sup>18</sup>Harold A. Korn and Norman S. Giddan, "Scoring Methods and Construct Validity of the Dogmatism Scale," Educational and Psychological Measurement, XXIV (Winter, 1964), 873.

<sup>19</sup>W. Warner Burke, "Social Perceptions as a Function of Dogmatism," Perceptual and Motor Skills, XXIII (October, 1966), 865.

<sup>20</sup>Glenn A. Saltzman, "Programmed Materials and School Counselor Development" (Unpublished Ph.D. dissertation, Ohio State University), Dissertation Abstracts, XXVII, 1967, p. 2077A.

<sup>21</sup>Carroll H. Leeds, "A Scale for Measuring Teacher-Pupil Attitudes and Teacher-Pupil Rapport," Psychological Monographs, LXIV (June, 1950), 23.

<sup>22</sup>Henry M. McGee, "Measurement of Authoritarianism and its Relations to Teachers' Classroom Behavior," Genetic Psychology Monographs, LII, 1955, p. 137.

Several studies have investigated the relationships between attitudes towards teaching and dogmatism. Rosen,<sup>23</sup> Johnson,<sup>24</sup> Johnston,<sup>25</sup> Bacchiano, Schiffman and Crowell<sup>26</sup> all confirmed a significant relationship between dogmatism and negative attitudes toward teaching. However, a high confidence level of teaching correlated with relative closed-mindedness according to Czajkowski's<sup>27</sup> findings. Hudspeth<sup>28</sup> related dogmatism to teacher attitudes toward the acceptance of new media and graphics.

#### Attitudes and Teacher Background

Certain studies have examined dogmatism and other personality aspects as they relate to teaching experience, educational background, and education courses--the variables used in this study. There is disagreement among researchers concerning the relationship of dogmatism to

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<sup>23</sup>Julius Rosen, "School Counselor Dogmatism and Vocational Identity," Psychological Reports, XXIII, 1968, p. 24.

<sup>24</sup>James S. Johnson, "The Relationship of Open- and Closed-Mindedness to Success in Student Teaching" (Unpublished Ed.D. dissertation, George Peabody College), Dissertation Abstracts, XXVII, 1966, p. 1282A.

<sup>25</sup>William W. Johnston, "Dogmatism as a Means of Predicting Insecurity, Self-Concept, Meaning, Attitude, and Effectiveness of Female Elementary Teachers" (Unpublished Ed.D. dissertation, University of South Dakota), Dissertation Abstracts, XXVIII, 1967, p. 1707A.

<sup>26</sup>Ralph B. Vacchiano, David C. Schiffman, and Areta Crowell, "Attitude Change as a Function of Intensive Training, Dogmatism and Authoritarianism," Psychological Reports, XIX (October, 1966), 361.

<sup>27</sup>Czajkowski, op.cit., p. 93.

<sup>28</sup>DeLayne K. Hudspeth, "A Study of Belief Systems and Acceptance of New Educational Media With Users and Non-Users of Audiovisual Graphics" (Unpublished Ph.D. dissertation, Michigan State University, 1966), 81.

teaching experience. Willower and Jones<sup>29</sup> confirmed a positive relationship between years of teaching experience and dogmatism. They found that experienced teachers held more conservative views, opposed changes toward permissive procedure, and dominated the informal structure of the school. Rabkin<sup>30</sup> was unable to substantiate Soderbergh's<sup>31</sup> thesis that veteran public school teachers are more dogmatic than new teachers. Hyman and Sheatsley<sup>32</sup> found that a strong correlation exists between education level and dogmatism. They concluded that individuals with a higher level of education are more open-minded. Plant<sup>33</sup> further supported the findings by determining that students become more open-minded as they progress through the college years.

Additional studies have investigated changes in the degree of instructor dogmatism. For example, Jacobs<sup>34</sup> confirmed that a positive attitudinal change toward a democratic point of view occurred while prospective teachers were taking professional education courses, but

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<sup>29</sup>Donald G. Willower and Ronald G. Jones, "When Pupil Control Becomes an Institutional Theme," Phi Delta Kappan, XLV (November, 1963), 109.

<sup>30</sup>Leslie Y. Rabkin, "The Dogmatism of Teachers," Journal of Teacher Education, XVII (Spring, 1966), 49.

<sup>31</sup>Peter A. Soderbergh, "Dogmatism and the Public School Teacher," Journal of Teacher Education, XV (September, 1964), 250.

<sup>32</sup>H. H. Hyman and P. B. Sheatsley, "The Authoritarian Personality: A Methodological Critique," Studies in the Scope and Method of the Authoritarian Personality (Glencoe: Free Press, 1954), p. 3.

<sup>33</sup>Walter T. Plant, "Longitudinal Changes in Intolerance and Authoritarianism for Subjects Differing in Amount of College Education Over Four Years," Genetic Psychology Monographs, LXXII, 1965, p. 283.

<sup>34</sup>Elmer B. Jacobs, "Attitude Change in Teacher Education: An Inquiry Into the Role of Attitudes in Changing Teacher Behavior," Journal of Teacher Education, XIX (Winter, 1968), 410.



negative change occurred during student teaching. However, Kinard<sup>35</sup> reported no significant change in openness during student teaching. The Jacobs and Kinard findings supported an earlier study by Crowell<sup>36</sup> who concluded that changes in intern teacher attitudes after an intensive training program were not related to dogmatism. Scarr<sup>37</sup> disclosed that the attitudes of education students towards themselves and others are more authoritarian than other college students, but they changed markedly when enrolled in a human development course. Bledsoe<sup>38</sup> compared selected characteristics to performance of provisionally and professionally certified beginning teachers. Very little difference was found between the two groups in their reactions to first year teaching experiences. However, trained observers rated professionally certified teachers as generally more competent. Beery<sup>39</sup> and Hall<sup>40</sup>

<sup>35</sup>Conrad R. Kinard, "A Study of Changes in Openness of Student Teachers During The Student Teaching Experience" (Unpublished Ed.D. dissertation, Louisiana State University), Dissertation Abstracts, XXIX, 1968, p. 1466A.

<sup>36</sup>Vacchiano, Schiffman and Crowell, op.cit., p. 361.

<sup>37</sup>Sandra Scarr, "How to Reduce Authoritarianism Among Teachers: The Human Development Approach," Journal of Educational Research, LXIII (April, 1970), 371

<sup>38</sup>Joseph Bledsoe, et al., Comparison Between Selected Characteristics and Performance of Provisionally and Professionally Certified Beginning Teachers in Georgia, Final Report #BR-5-1029 (September, 1967), 280.

<sup>39</sup>John R. Beery, "Does Professional Preparation Make a Difference?" Journal of Teacher Education, XIII (December, 1962), 395.

<sup>40</sup>Harry O. Hall, "Professional Preparation and Teacher Effectiveness," Journal of Teacher Education, XV (March, 1964), 76.

found that fully certified teachers were more effective based on student achievement scores. Collins<sup>41</sup> determined that administrators rated trained teachers higher than untrained ones after the first year of teaching. She also concluded that untrained teachers are less committed to the profession based on: the number who left teaching after one year (4.8% of the trained versus 25.4% of the untrained); the number who did not affiliate with any professional organizations (15.9% of the trained versus 36.5% of the untrained); and the number who did not read any professional materials such as journals (11.1% of the trained versus 36.5% of the untrained). Other studies have contradicted the preceding findings. An overall negative relationship between the amount of teaching experience and teaching effectiveness was postulated by Ryans.<sup>42</sup> He reported that the amount of college training appeared to make little difference in effective teaching behavior. Hawkins and Stoops<sup>43</sup> confirmed that formal training and years of experience are not significantly related to teaching competency. Similar findings evolved from Soar's<sup>44</sup> research. Soar determined that years of teaching

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<sup>41</sup>Mildred Collins, "Untrained and Trained Graduate Teachers: A Comparison of Their Experiences During the Probationary Year," British Journal of Educational Psychology, XXXIV, (February, 1964), 82.

<sup>42</sup>David G. Ryans, "A Study of the Extent of Association of Certified Professional and Personal Data with Judged Effectiveness of Teacher Behavior," Journal of Experimental Education, XX (September, 1951), 77.

<sup>43</sup>Edward E. Hawkins and Emery Stoops, "Objective and Subjective Identification of Outstanding Elementary Teachers," Journal of Educational Research, LIX (April, 1966), 345.

<sup>44</sup>Robert S. Soar, "Research in the Teaching Process: Four Studies with the OSCAR Technique," National Society of Colleges for Teacher Education, 1966, p. 3.

experience and semester hours in education were not significantly correlated with teacher effectiveness. However, Crellin's<sup>45</sup> study revealed a slight tendency for subjects with more years of teaching experience to gain less on the measure of attitude change. North<sup>46</sup> rejected his own hypothesis that there is a positive relationship between the number of years of teaching experience and instructor attitudes.

### Attitudinal Changes in Beginning and Student Teachers

Several researchers have analyzed attitudinal changes which take place in student teachers and beginning teachers. In Langan's<sup>47</sup> study over sixty per cent of the beginning teachers underwent an unfavorable attitude change toward students and teaching during the first five months of the initial teaching experience. School district characteristics such as number of orientation days, number of beginning teachers hired, school population, and the number of in-service sessions had no bearing on the degree and direction of attitude change. Day's<sup>48</sup>

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<sup>45</sup>David W. Crellin, "Learning and Attitude Change During an In-service Workshop in Value Clarification" (Unpublished Ed.D. dissertation, University of Rochester), Dissertation Abstracts, XXIX, 1968, p. 1803A.

<sup>46</sup>Willard E. North, "A Study of the Relationship Between Teaching Experience and the Factorial Structure of Teachers" (Unpublished Ed.D. dissertation, University of Arkansas), Dissertation Abstracts, XXI, 1961, p. 3363A.

<sup>47</sup>Joseph F. Lagan, "What Happens to the Attitudes of Beginning Teachers?" Grade Teacher, LXXXVIII (September, 1970), 130.

<sup>48</sup>Harry P. Day, "Attitude Changes of Beginning Teachers After the Initial Teaching Experience," Journal of Teacher Education, X (September, 1959), 326.

beginning teachers exhibited a negative attitudinal change toward pupils and teaching during the first semester of their teaching experience.

An investigation of beginning teacher problems by Franc<sup>49</sup> revealed that instruction and control were the major concern for the duration of the first year of teaching. Teachers did not perceive themselves as receiving help with problems from established orientation programs or from teacher organizations. Fifty per cent rated college programs as ineffective in preparing them to cope with teaching problems. Dewey<sup>50</sup> concluded that being placed in a teaching situation prematurely forces neophytes to concentrate on external forces, such as classroom control, instead of subject matter and the psychological reactions of students. Further support for this type of finding in Campbell's<sup>51</sup> research. Campbell discovered that perceived problems must be recognized and resolved with the task of teaching. The greatest concerns perceived were teaching techniques and teacher-pupil relations which confirmed the findings of an earlier study by Henry.<sup>52</sup>

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<sup>49</sup>Lillian H. Franc, "Problems Perceived by Seventy-Five Beginning Elementary School Teachers" (Unpublished Ed.D. dissertation, Columbia University), Dissertation Abstracts, XXXI, 1971, p. 3389A.

<sup>50</sup>John Dewey, "The Relationship of Theory to Practice in the Education of Teachers," National Society for the Scientific Study of Education, 3rd yearbook, Chicago, 1904, pp. 9-10.

<sup>51</sup>Gene Virginia Campbell, "A Descriptive Study of the Effects of Student Teaching Upon Attitudes, Anxieties, and Perceived Problems of Student Teachers" (Unpublished Ph.D. dissertation, University of Houston), Dissertation Abstracts, XXIX, 1969, p. 3890A.

<sup>52</sup>Marvin A. Henry, "The Relationship of Difficulties of Student Teachers to Selected Aspects of the Professional Sequence of Education" (Unpublished Ed.D. dissertation, Indiana University), Dissertation Abstracts, XXIV, 1964, p. 3219.

In McLevie's<sup>53</sup> research fifty per cent of the student teachers reported concerns which indicated a lack of ease in interpersonal relationships. Five per cent viewed student teaching as a personal threat which they did not feel adequate to meet.

Some educators recognizing the importance of positive attitudes on the part of teachers have sought to measure attitudes of student teachers. Varied findings have resulted. One such effort by Lipscomb<sup>54</sup> measured forty-four elementary student teachers' attitude change and found forty-one students did have a statistically significant attitude shift even though no specific program was used to achieve this shift. A favorable attitude change toward teaching during the student teaching experience was also found by Rawlins.<sup>55</sup> He determined that beginning student teachers tend to perceive they will encounter many problems to a significantly greater degree than they are encountered. Anderson's<sup>56</sup> survey, however, found no significant change in attitudes toward teaching and education among fifty per cent of the student teachers.

<sup>53</sup>John G. McLevie, "An Examination of Teaching Concerns Reported by Secondary Student Teachers" (Unpublished Ph.D. dissertation, Michigan State University, 1970), 160.

<sup>54</sup>Elra E. Lipscomb, "Study of the Attitudes of Student Teachers in Elementary Education," Journal of Educational Research, LX (December, 1966), 159.

<sup>55</sup>George M. Rawlins, III, "A Study of Prospective Teachers' Problem Perceptions Compared With Problems Encountered and Attitude Changes Occurring During Student Teaching" (Unpublished Ed.D. dissertation, University of Tennessee), Dissertation Abstracts, XXXI, 1970, p. 3397A.

<sup>56</sup>Sara E. Anderson, "The Changes in Attitudes of Prospective Teachers Toward Education and Teaching in Secondary Schools." (Unpublished, Ed.D. dissertation, Indiana University), Dissertation Abstracts, XXV, 1965, p. 4557.

Amidon and Flanders'<sup>57</sup> studies suggest teachers should be exposed to some type of human relations. They point out that although there are many patterns of teaching behavior, a positive attitude toward the student was essential for any pattern to be successful.

A significantly positive change in attitudes during methods courses and a negative attitude change during student teaching were discovered by McEwin.<sup>58</sup> Conflicting results were reported by Campbell<sup>59</sup> who determined that during student teaching, fifty per cent of the sample had positive attitudinal changes toward teaching while twenty per cent had negative changes. The remainder showed no change in attitude.

#### Attitudinal Changes During Orientation And In-Service Programs

Several researchers have investigated the effects of orientation and in-service programs on teacher attitudes. Fehl<sup>60</sup> determined that an observation-participation program before student

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<sup>57</sup>Edmond J. Amidon and Ned A. Flanders, A Manual for Understanding and Improving Teachers' Classroom Behavior (Minneapolis: Paul S. Amidon and Associates, Inc., 1963), p. 61

<sup>58</sup>Tom McEwin, "Attitudinal Change of Students During Methods Courses and Student Teaching" (Unpublished Ph.D. dissertation, East Texas State University), Dissertation Abstracts, XXIX, 1968, p. 169A.

<sup>59</sup>Campbell, op cit., p. 3890A.

<sup>60</sup>Patricia K. Fehl, "The Effects of an Observation-Participation Program on Attitudes and on Concepts" (Unpublished Ed.D. dissertation, Indiana University), Dissertation Abstracts, XXVII, 1967, p. 3338A.

teaching reduced anxiety concerning difficulties. The more hours spent in the program, the more positive their attitudes became toward teaching and pupils. Funk<sup>61</sup> substantiated these findings through an investigation of anxiety and attitudinal changes resulting from a direct program of pre-student teaching professional laboratory experiences.

New teachers and their commitments to teaching and job satisfaction were related to an adequate induction program by Koontz.<sup>62</sup> He defined adequate induction programs as the total planned program of assistance provided to beginning teachers in their first year of teaching including information at the time of recruitment, pre-school orientation, classroom supervision, establishing a relationship with fellow teachers, in-service programs, and new teacher assignment policies. Koontz found that beneficial results were obtained when principals planned and conducted programs of assistance for the beginning teachers on their staff. The existence of an adequate induction program was significantly related to a teaching commitment and to a high level of job satisfaction. Beginning teachers who were employed in schools which neglected induction programs left teaching or reported planning to leave it in the near future more frequently than those who were employed in schools which provided adequate induction programs.

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<sup>61</sup>Haldon D. Funk, "The Effects of Pre-Student Teaching Professional Laboratory Experiences on Selected Attitudes and Concepts of Prospective Elementary Teachers" (Unpublished Ed.D. dissertation, Indiana University), Dissertation Abstracts, XXIX, 1968, p. 3020A.

<sup>62</sup>David E. Koontz, "Professional Attitudes of Beginning Teachers and Their School's Personnel Policies" (Unpublished Ph.D. dissertation, Kent State University), Dissertation Abstracts, XXVIII, 1968, p. 4416A.

Schild<sup>63</sup> attempted to determine the characteristics and prevalence of in-service practices. Responses to his study items by seventy-three school districts in twenty-nine states led to the following conclusions:

1. The average system provided two formal in-service sessions per faculty member per month; the larger schools seemed to provide fewer opportunities. About one-half of the systems planned to expand their programs.
2. Released-time and in-service education were provided in 56% of the systems. Fewer than one-half provided for in-service education in an extended-year program; such a program affected fewer than 8% of the staff.
3. University consultants were provided in 8% of the systems.
4. All but nine districts used some evaluative procedure. Unfortunately, such procedures relied primarily on informal observations and administrative judgments. Many respondents voiced a need for more objective methods.

Gerheim<sup>64</sup> and Cory<sup>65</sup> found that teachers accepted and valued in-service education programs which were planned carefully, locally

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<sup>63</sup>Robert J. Schild, "A Study of Certain Practices and Some Proposed Directions for In-Service Education Programs in Selected Schools of the APSS" (Unpublished Ed.D. dissertation, Columbia University), Dissertation Abstracts, XXV, 1964, p. 315.

<sup>64</sup>Mearl F. Gerheim, "Teacher Evaluation of the Nature and Effectiveness of In-Service Teacher Education in Selected School Districts" (Unpublished Ed.D. dissertation, University of Pittsburgh), Dissertation Abstracts, XX, 1960, p. 4339.

<sup>65</sup>Noel D. Cory, "Incentives Used in In-Service Education for Teachers," (Unpublished Ed.D. dissertation, Indiana University), Dissertation Abstracts, XX, 1959, p. 3145.



and cooperatively. Schwalenberg<sup>66</sup> and Lucas<sup>67</sup> concluded that the most successful orientation programs were those which derived their bases and objectives from teacher needs and which were based on knowledge of the teachers' backgrounds.

The relationships between human-relations training, teacher personality, and teacher behavior were examined by Bowers and Soar.<sup>68</sup> They found that the best adjusted teachers become more effective following training but the less well-adjusted teachers become less effective. In a second study concerning the effects of sensitivity training, Soar<sup>69</sup> cross-validated his previous findings.

According to Kelley,<sup>70</sup> workshop evaluation results have indicated that such experiences help change attitudes or help people acquire new attitudes. One of the most common and important workshop

<sup>66</sup>Richard J. Schwalenberg, Teacher Orientation Practices in Oregon Secondary Schools (Eugene: University of Oregon Press, 1965), p. 110.

<sup>67</sup>John A. Lucas, The Orientation of High School Teachers (Los Angeles: University of Southern California, 1963), p. 221.

<sup>68</sup>Norman D. Bowers and Robert S. Soar, Studies of Human Relations in the Teaching-Learning Process, Part V: Final Report, USOE Cooperative Research Project #469, 1961, p. 5.

<sup>69</sup>Robert S. Soar, "Research in the Teaching Process: Four Studies With the OScAR Technique," National Society of Colleges for Teacher Education, 1966, p. 2.

<sup>70</sup>Earl C. Kelley, The Workshop Way of Learning (New York: Harper and Brothers, 1951), p. 112.

outcomes is change in attitudes and feelings toward human beings. When attempting to judge the effectiveness of workshops as a means of in-service training, Karbal<sup>71</sup> found the greatest gains to be in help given the inexperienced teacher concerning human relations, school organization and classroom management. Bocks and Schten<sup>72</sup> conducted a workshop with the objective of renewing and improving positive attitudes toward teaching and students. Significant attitudinal change resulted in a positive direction. Stanley<sup>73</sup> found significantly positive attitudinal changes (including open-mindedness) in teachers during a nine-month in-service program. Variables such as formal education and teaching experience appeared to have little predictive value. Donoghue<sup>74</sup> was unable to support his hypothesis concerning a significant relationship between participation in an encounter group experience and changes in teacher attitudes toward self and toward students.

The relationship of years of teaching experience and educational background to teachers' perceptions of in-service education

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<sup>71</sup>Harold T. Karbal, "Training of Teachers" (Unpublished Ed.D. dissertation, Wayne State University), Dissertation Abstracts, XXV, 1964, p. 1771.

<sup>72</sup>William M. Bocks and Arnold A. Schten, "Investment Pays Off in Attitude Change," Western Michigan University, Kalamazoo, 1967, p. 1. (Mimeographed).

<sup>73</sup>Gene E. Stanley, "A Study of the Attitudinal Change of Teachers in an In-Service Education Program" (Unpublished Ph.D. dissertation, Ohio State University), Dissertation Abstracts, XXXI, 1970, p. 668A.

<sup>74</sup>Paul L. Donoghue, "A Study of the Relationship of Basic Encounter Group Experience to Change in Teacher Attitudes Towards Students and Towards Self and to Student Perceptions of these Teachers" (Unpublished Ph.D. dissertation, St. Louis University), Dissertation Abstracts, XXXI, 1971, p. 4001A.

was investigated by Turner.<sup>75</sup> As both variables increased, perceptions of the effectiveness of in-service education decreased. She identified the following factors as contributing to effective in-service education for a majority of the teachers: (1) relevant and practical content that could be applied in present assignments; (2) freedom to question, criticize, or express opinions during the workshops; (3) sharing ideas with colleagues; (4) leadership of the consultant; (5) relaxed and informal atmosphere; (6) personal involvement in the activities; (7) demonstrations with students; (8) new materials that could be used in the classroom. Turner concluded that:

1. There is no single format for in-service education that is effective for all teachers; however, there are elements which should be incorporated into all programs if teachers are to perceive them as effective.
2. The climate in which in-service is conducted is a major ingredient in teachers' perceptions of effective in-service education.
3. Teachers must be actively involved in the learning process, not passive listeners.

H. S. Zurhellen<sup>76</sup> measured open-mindedness (using the Rokeach Dogmatism Scale), attitudes toward students, reactions to teaching situations, and self-concept during an in-service education program. He found

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<sup>75</sup>Indie S. Turner, "A Study of Teachers' Perceptions of an In-Service Education Program in Three Southern Maryland Counties" (Unpublished Ed.D. dissertation, George Washington University), Dissertation Abstracts, XXXI, 1970, p. 2780A.

<sup>76</sup>Henry S. Zurhellen, "A Study of Teacher Attitudes During an In-Service Education Program in Selected East Tennessee Schools" (Unpublished Ed.D. dissertation, University of Tennessee), Dissertation Abstracts, XXXI, 1971, p. 4613A.

negative attitudinal changes with secondary teachers exhibiting a more negative shift than elementary teachers. J. H. Zurhellen<sup>77</sup> using the same instruments, investigated attitudinal changes during concentrated orientation sessions and an academic-year-long in-service program. Teachers showed significant change in attitudes toward students, reactions to teaching situations, and the ideal self. The patterns of shift were positive during the orientation, negative during August to January and mixed from January to April.

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<sup>77</sup>Joan H. Zurhellen, "An Evaluation of Attitude Changes Among Science Teachers During an ESCP In-Service Institute" (Unpublished Ed.D. dissertation, University of Tennessee), Dissertation Abstracts, XXXI, 1971, p. 4613A.

## CHAPTER III

### PROCEDURES UTILIZED IN THE INVESTIGATION

#### Selection of the Study Population

Secondary vocational education teachers used as subjects for the study were employed by one of the three new area vocational centers in Michigan which opened Fall, 1971.

Several factors guided the selection of this population for study:

1. It was anticipated that a new facility would be employing a number of novice teachers who would undoubtedly need to make a more significant role adjustment as compared to experienced teachers.
2. Since new schools were utilized, all teachers were faced with a role adjustment to some extent and therefore, could justifiably be a part of the study rather than limiting the population to novice teachers.
3. The likelihood of faculty participation at the suggestion of the principal seemed much greater at a new facility.
4. It was anticipated that data collection would be more uniform with a higher percentage return.
5. New facilities seemed advantageous since it would not be necessary to contend with different pre-existing, informal organization structures at various schools.

#### Description of the Study Population

The population is comprised of all those teachers who reported to work on the designated first day at one of the following

**Area Vocational Centers:**

Group I: Kent Beltline Skills Center, Grand Rapids.

Group II: Southeast Oakland Vocational Education Center,  
Royal Oak.

Group III: Southwest Oakland Vocational Education Center,  
Walled Lake.

The first page of the questionnaire requested background information concerning the three factors identified as independent variables.<sup>1</sup> Table I presents information concerning the highest educational levels attained by the teachers at each school as well as the entire teacher population surveyed. The number of education courses taken by the teachers is depicted in Table II and the years of previous teaching experience are presented in Table III.

An examination of the total column in the three tables reflects wide variances in background. Such heterogeneity can probably be partially attributed to the diversity of offerings encompassed in the vocational education programs offered at the Centers. Teachers are employed on the basis of their competence and experience related to a specific field. In certain program areas, they may lack a college degree and the education courses required for employment in other high school subject areas.

Variances exist among the three schools investigated. Differences in emphasis on the criteria used for hiring may be a contributing factor. Another factor may be differences in program offerings among the three schools. Also the number and variety of

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<sup>1</sup>The first page of the questionnaire appears in Appendix A.

TABLE I

## EDUCATIONAL LEVEL OF TEACHERS

Educational Level	GROUP I		GROUP II		GROUP III		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
High school diploma or less	14	37.8	2	9.1	0	-	16	22.2
One or two years of college	6	16.2	7	31.8	2	15.4	15	20.8
Three or four years of college	16	43.2	7	31.8	10	76.9	33	45.8
Masters degree and beyond	1	2.7	6	27.3	1	7.7	8	11.1
TOTAL	37	100%	22	100%	13	100%	72	100%

TABLE I

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High school diploma or less	14	37.8	2	9.1	0	-	16	22.2
One or two years of college	6	16.2	7	31.8	2	15.4	15	20.8
Three or four years of college	16	43.2	7	31.8	10	76.9	33	45.8
Masters degree and beyond	1	2.7	6	27.3	1	7.7	8	11.1
TOTAL	37	100%	22	100%	13	100%	72	100%



TABLE II

## NUMBER OF EDUCATION COURSES TAKED BY TEACHERS

Number of Education Courses	GROUP I		GROUP II		GROUP III		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
None	26	70.3	8	36.4	6	46.2	40	55.6
1 to 5	4	10.8	5	22.7	2	15.4	11	15.3
6 to 10	3	8.1	6	27.3	2	15.4	11	15.3
11 to 15	1	2.7	1	4.5	2	15.4	4	5.6
16 and over	3	8.1	2	9.1	1	7.7	6	8.3
TOTAL	37	100%	22	100%	13	100%	72	100%

TABLE III

## YEARS OF PREVIOUS TEACHING EXPERIENCE

Number of Years of Teaching Experience	GROUP I		GROUP II		GROUP III		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
None	21	56.8	9	40.9	8	61.5	38	52.8
1 to 2	9	24.3	4	18.2	3	23.1	16	22.2
3 to 5	6	16.2	4	18.2	1	7.7	11	15.3
6 to 9	1	2.7	4	18.2	0	-	5	6.9
10 and over	0	-	1	4.5	1	7.7	2	2.8
TOTAL	37	100%	22	100%	13	100%	72	100%

teacher applicants seem to vary considerably from one vocational education program area to another.

### Instrumentation

The Confidence Level Inventory for Teaching and the Rokeach Dogmatism Scale were selected to measure the dependent variables, namely, confidence for teaching and open-mindedness.

#### Confidence Level Inventory for Teaching

The Confidence Level Inventory for Teaching requests the subject to rate himself on a ten point scale ranging from, "extreme concern about abilities" to "extreme confidence in abilities" for twenty-four behaviorally stated aspects for teaching.<sup>2</sup> Total scores were obtained by summing a subject's responses for all twenty-four items. High scores indicate high confidence for teaching whereas low scores indicate low confidence for teaching.

Professors Shirley Brehm and Jean LePere of Michigan State University developed the Confidence Level Inventory for Teaching (CLIT). The instrument is designed to measure self-concept in relation to teaching. It originated from an eighty-one item instrument used by supervisors to evaluate the effectiveness of student teacher performance which LePere and Cox<sup>3</sup> revised to a self-evaluation instrument in 1964.

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<sup>2</sup>The CLIT appears in Appendix B.

<sup>3</sup>Jean M. LePere and Richard C. Cox, Training Elementary Teachers: Comparison of Separate and Block Methods Courses (East Lansing, Michigan: Bureau of Educational Research Services, 1964).

They reasoned that a student teacher's attitude toward his own potential performance in the tasks considered critical in teaching was de facto evidence of his level of confidence for teaching. LePere and Brehm administered the test to several groups of Michigan State University students using item analysis to determine internal validity. The eighty-one item Form I of the CLIT was then pared to forty-four items after such analysis. Form II of the CLIT was administered to 179 subjects. On the basis of low and inconsistent item-test coefficients, Form III evolved with twenty-four items. Test-retest data on Form III was obtained from 126 subjects in the spring, 1967. The correlation was .47 before and after ten weeks of student teaching. Czajkowski<sup>4</sup> used the CLIT in his study for a pre and post-test with 124 students. He also item analyzed the instrument and found results consistent with those obtained by LePere and Cox. He reported a correlation on the CLIT test-retest of .61. Smith<sup>5</sup> also used the CLIT as a pre and post-test with sixty-six student teachers and found positive changes in confidence.

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<sup>4</sup>Theodore J. Czajkowski, "The Relationship of Confidence for Teaching to Selected Personal Characteristics and Performance of Student Teachers" (Unpublished Ph.D. dissertation, Michigan State University, 1970).

<sup>5</sup>Martha L. Smith, "A Study of Elementary Student Teacher Confidence in and Attitudes Toward Music and Changes That Occur in a Student Teaching Experience" (Unpublished Ph.D. dissertation, Michigan State University, 1969).

### Rokeach Dogmatism Scale

The Rokeach Dogmatism Scale measures individual differences in openness or closedness of belief systems, general authoritarianism, and general tolerance. The Scale was developed by Milton Rokeach<sup>6</sup> as the primary measuring instrument to test theory of belief systems. The Rokeach theory resulted from work on the authoritarian personality which viewed a personality as an organization of beliefs or expectancies having a definable and measurable structure. Rokeach characterized a person as having an open system to the extent that the individual could receive, evaluate, and act upon external relevant information. Rokeach reported reliabilities ranging from .68 to .93 for his forty item scale.

Items on the test are familiar to the average person in everyday life, and transcend specific ideological positions. The respondent indicates the relative strength of his agreement (+1 to +3) or disagreement (-1 to -3) on each proposition. Zero is omitted to obviate neutral rating. For scoring purposes, the scale was subsequently converted to a 1 to 7 scale by adding a constant of 4 to each item. A subject's score was obtained by summing each item. For all statements, agreement is scored as closed and disagreement as open. A higher score indicated a more dogmatic individual.

The short form of the Rokeach scale used in this study was developed by Troidahl and Powell<sup>7</sup> in an effort to decrease administration

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<sup>6</sup>Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960).

<sup>7</sup>Verling C. Troidahl and Frederic A. Powell, "A Short-Form Dogmatism Scale for Use in Field Studies," Social Forces, XLIX (December, 1965), 211-214.

time while maintaining high reliability. Troidahl and Powell administered Form E, Rokeach's forty item test, to two samples of adult subjects from which a split-half reliability coefficient of .84 was obtained. Respondents' scores on each item were correlated with their total scores to obtain a homogeneity index for each item. Several short forms of the scale were constructed using the items having the highest item-total score correlation. Scores on each short form were then correlated with dogmatism scores on the complete scale. The twenty-item version correlated .95 and .94 for the Boston and Lansing samples respectively. According to these figures, the twenty-item short form is a good predictor of what a respondent would do on Form E.<sup>8</sup>

#### Collection of Data

The principals of the three schools administered the two instruments to their respective faculty on the dates given in Table IV.

TABLE IV  
DATES WHEN INSTRUMENTS WERE ADMINISTERED

	Group I	Group II	Group III
Faculty reported to work	Aug. 9	Aug. 30	Aug. 16
Faculty completed 3 weeks of classes	Sept. 30	Sept. 30	Sept. 22
Faculty completed 6 weeks of classes	Oct. 21	Oct. 21	Oct. 13

<sup>8</sup>The twenty-item short form of the Dogmatism Scale appears in Appendix C.

Due to varying lengths of orientation or induction programs, the number of days between the first and second testing differed.

Table V details the length of each school's initial induction program.

TABLE V  
LENGTH OF INITIAL INDUCTION PROGRAM

	Group I	Group II	Group III
Faculty reported to work	Aug. 9	Aug. 30	Aug. 16
Classes began	Sept. 9	Sept. 9	Sept. 1
Number of working days in induction program	22 days	7 days	12 days

To limit the participant's recall of answers stated previously, the order of questions on both instruments was scrambled for the second and third testing. In addition, four questions were added to the short form of the Dogmatism Scale that were not counted in the scoring.

## CHAPTER IV

### ANALYSIS OF THE DATA

Nine hypotheses were tested. In the following sections, the analysis for each is presented. As explained in Chapter III, the two instruments were completed by the same participants three different times. Seventy-two individuals completed the set of questionnaires including background data the first time. Eight of these people were not involved in both of the subsequent repeated measures; leaving a net total of sixty-four participants included in the analysis of hypotheses one and two. The remaining hypotheses utilized only the first testing time for analysis and therefore included all seventy-two participants.

To determine the significance of change for testing hypotheses one and two, analysis of variance was used. Pearson correlations were computed to analyze hypotheses three through nine. The significance of the correlation coefficients were then determined.

#### Hypothesis I

Group I will show a greater positive change in expressed confidence level for teaching than Group II and III.

Confidence Level Inventory for Teaching (CLIT) self-ratings were used as the measure of expressed confidence level for teaching. The results appear in Figure I, Table I and Table II.



FIGURE I

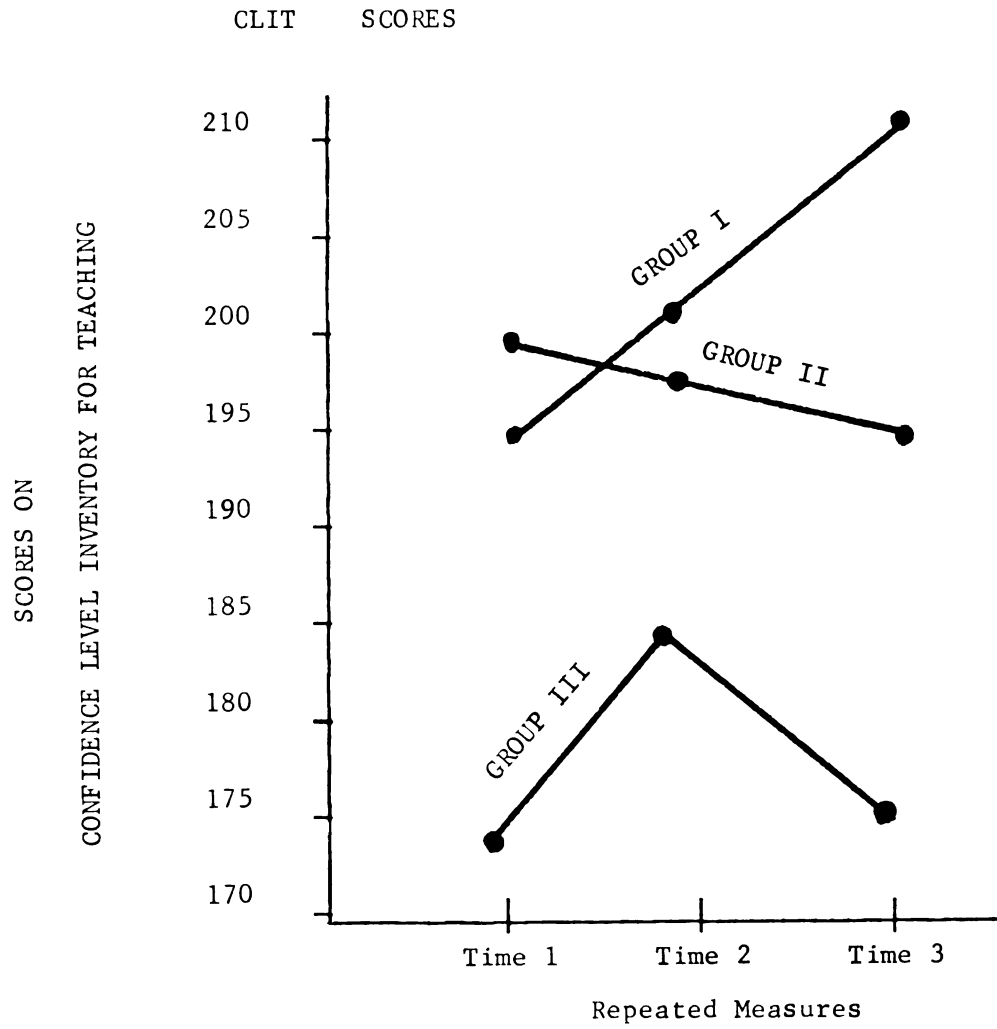


TABLE I  
CLIT SCORES

	TIME 1	TIME 2	TIME 3	CHANGE TIME 1 TO TIME 3
GROUP I 34 PEOPLE	$\bar{x} = 194.9$ $s = 24.8$	$\bar{x} = 200.8$ $s = 16.3$	$\bar{x} = 208.7$ $s = 29.2$	$\bar{x} = +13.8$ $s = + 4.4$
GROUP II 19 PEOPLE	$\bar{x} = 199.3$ $s = 19.9$	$\bar{x} = 198.4$ $s = 22.0$	$\bar{x} = 195.2$ $s = 22.6$	$\bar{x} = - 4.1$ $s = + 2.7$
GROUP III 11 PEOPLE	$\bar{x} = 174.6$ $s = 24.0$	$\bar{x} = 184.6$ $s = 26.4$	$\bar{x} = 176.8$ $s = 29.4$	$\bar{x} = + 2.2$ $s = + 5.4$
TOTAL 64 PEOPLE	$\bar{x} = 192.7$ $s = 23.3$	$\bar{x} = 197.3$ $s = 20.0$	$\bar{x} = 199.2$ $s = 27.5$	$\bar{x} = + 6.5$ $s = + 4.2$

TABLE II  
ANALYSIS OF VARIANCE TABLE ON  
CONFIDENCE LEVEL FOR TEACHING

Source	df	mean squares	F
Groups	2	6545.83	5.93*
Subject	61	1104.57	
Repeated measures	2	708.94	2.39
Interaction	4	652.74	2.20

\*Significant at the .05 level of confidence.

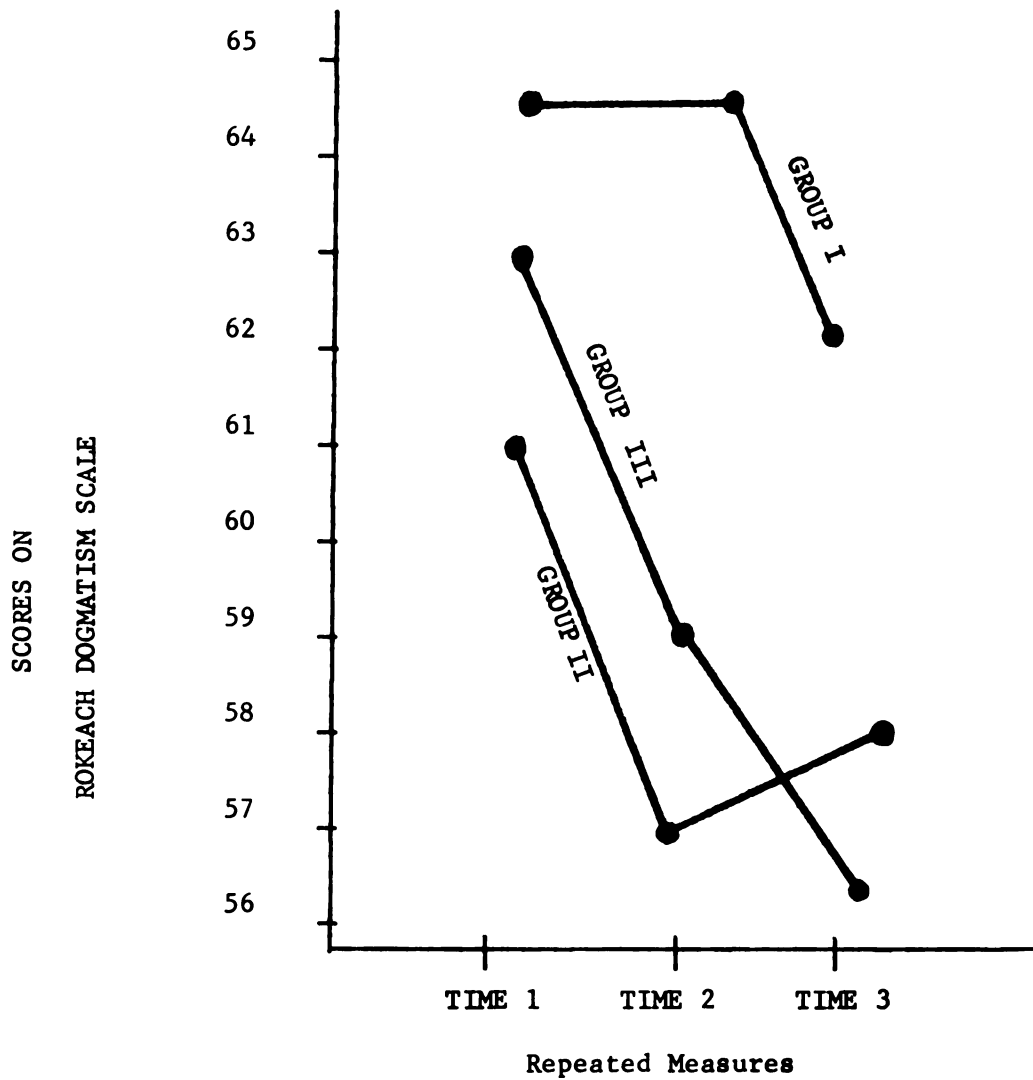
The research hypothesis that Group I will show a greater positive change was not supported since the change that occurred (interaction in Table 2) was not significant at the .05 level of confidence. However, a significant difference at the .05 level did result in groups irrespective of the three testing times.

#### Hypothesis II

Group I will show a greater positive change in open-mindedness than Group II and III.

The Rokeach Dogmatism Scale was used to measure open-mindedness. The results appear in Figure II, Table III and Table IV.

FIGURE II  
DOGMATISM SCORES \*



\*A negative slope indicates a decrease in dogmatism (closed-mindedness) i.e. a positive change in open-mindedness, since the lower the test score, the more open-minded a person is evaluated to be.

TABLE III

## DOGMATISM SCORES

GROUP I 34 PEOPLE	$\bar{x} = 64.5$ $s = 13.7$	$\bar{x} = 64.3$ $s = 16.1$	$\bar{x} = 61.9$ $s = 16.5$	$\bar{x} = -2.6$ $s = +2.8$
GROUP II 19 PEOPLE	$\bar{x} = 61.2$ $s = 14.2$	$\bar{x} = 57.1$ $s = 17.8$	$\bar{x} = 58.0$ $s = 18.8$	$\bar{x} = -3.2$ $s = +4.6$
GROUP III 11 PEOPLE	$\bar{x} = 63.0$ $s = 11.5$	$\bar{x} = 58.8$ $s = 10.2$	$\bar{x} = 56.7$ $s = 13.9$	$\bar{x} = -6.3$ $s = +2.4$
TOTAL 64 PEOPLE	$\bar{x} = 63.2$ $s = 13.5$	$\bar{x} = 61.2$ $s = 15.8$	$\bar{x} = 59.8$ $s = 16.8$	$\bar{x} = -3.4$ $s = +3.3$

TIME 1

TIME 2

TIME 3

CHANGE

TIME 1 TO TIME 3

Table IV  
ANALYSIS OF VARIANCE TABLE  
FOR OPEN-MINDEDNESS

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Source	df	mean squares	F
<hr/>			
Groups	2	493.53	.79
Subjects	61	624.70	
Repeated measures	2	187.52	4.06*
Interaction	4	42.18	.91

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\*Significant at the .05 level of confidence.

The research hypothesis that Group I will show a greater positive change was not supported since the change that occurred (interaction) was not significant at the .05 level of confidence. However, a significant difference at the .05 level of confidence did result in the repeated measures irrespective of groups as shown in Table IV.

### Hypothesis III

There is a positive relationship between  
the expressed confidence level for teaching  
and open-mindedness.

TABLE V  
PRODUCT-MOMENT CORRELATIONS

	YEARS OF TEACHING	ED LEVEL	# ED COURSES	DOGMATISM	CONFIDENCE
Years of teaching	1.00				
Ed level	.27	1.00			
# of ed courses	.30	.55	1.00		
Dogmatism	-.30	-.33	-.29	1.00	
Confidence	.27	.15	.19	-.24	1.00

Table V provides an overview of the correlations determined for the remaining hypothesis. Each correlation was examined for its significance utilizing the null hypothesis that the population is zero. The table, "Correlation Coefficients at the 5% and 1% Levels of Significance" was used to obtain the following information:

TABLE VI  
SIGNIFICANCE OF CORRELATIONS

Confidence	Sample Size	df	r
%5 level	72	70	.23
%1 level	72	70	.30

The r in Table VI<sup>1</sup> is the minimum for significance at the level specified. Therefore an r at the levels in the chart or greater indicated the presence of at least some degree of correlation.

TABLE VII  
CORRELATION BETWEEN CONFIDENCE FOR  
TEACHING AND OPEN-MINDEDNESS

	Mean	Standard Deviation	Correlation
Confidence	191.44*	26.62	r = -.24**
Open-Mindedness	63.26*	14.83	

\*Means derived from scores obtained on the teachers' first day of employment.

\*\*Significant at the .05 level of confidence.

<sup>1</sup>Henry E. Garrett, Statistics in Psychology and Education (New York: David McKay Company, Inc., 1966), p. 201.



The research hypothesis that there is a positive relationship between the expressed confidence level for teaching and open-mindedness was supported at the .05 level of confidence. A negative correlation coefficient indicated a positive relationship since a lower score on the Rokeach Dogmatism Scale reflects a more open-minded person.

#### Hypothesis IV

There is a positive relationship between the expressed confidence level for teaching and the number of years of prior teaching experience.

TABLE VIII  
CORRELATION BETWEEN CONFIDENCE FOR TEACHING  
AND YEARS OF TEACHING EXPERIENCE

	Mean	Standard Deviation	Correlation
Confidence	191.44*	26.62	$r = .27^{**}$
Years of Teaching Experience	1.43	2.08	

\*Mean derived from scores obtained on the teachers' first day of employment.

\*\*Significant at the .05 level of confidence.

The research hypothesis that there is a positive relationship between confidence level for teaching and the years of teaching experience was supported at the .05 level of confidence.

#### Hypothesis V

There is a positive relationship between the expressed confidence level for teaching and the number of professional education courses completed.

TABLE IX  
CORRELATION BETWEEN CONFIDENCE FOR TEACHING  
AND THE NUMBER OF PROFESSIONAL EDUCATION COURSES

	Mean	Standard Deviation	Correlation
Confidence	191.44*	26.62	$r = .19$
# of Ed Courses	3.93	6.04	

\*Mean derived from scores obtained on the teachers' first day of employment.

The obtained correlation indicated a relationship not significantly different from zero at the .05 level of confidence. The research hypothesis of a positive relationship was not supported.

#### Hypothesis VI

There is a positive relationship between the expressed confidence level for teaching and the level of education.

**TABLE X**  
**CORRELATION BETWEEN CONFIDENCE LEVEL FOR TEACHING**  
**AND LEVEL OF EDUCATION**

	Mean	Standard Deviation	Correlation
Confidence	191.44*	26.62	r = .15
Level of Education	4.60	1.83	

\*Mean derived from scores obtained on the teachers' first day of employment.

The obtained correlation indicated a relationship not significantly different from zero at the .05 level of confidence. The research hypothesis of a positive relationship was not supported.

#### Hypothesis VII

There is a positive relationship between the open-mindedness and the number of years of prior teaching experience.

TABLE XI  
CORRELATION BETWEEN OPEN-MINDEDNESS  
AND YEARS OF TEACHING EXPERIENCE

	Mean	Standard Deviation	Correlation
Open-mindedness	63.26 *	14.83	$r = -.30^{**}$
Years of teaching experience	1.43	2.08	

\*Mean derived from scores obtained on the teachers' first day of employment

\*\*Significant at the .01 level of confidence.

The research hypothesis is that there is a positive relationship between open-mindedness and the years of teaching experience was supported at the .01 level of confidence. As mentioned previously, a negative  $r$  indicates a positive relationship since a lower test score suggests a more open-minded person.

#### Hypothesis VIII

There is a positive relationship between the open-mindedness and the number of professional education courses completed.

TABLE XII  
CORRELATION BETWEEN OPEN-MINDEDNESS  
AND NUMBER OF EDUCATION COURSES

	Mean	Standard Deviation	Correlation
Open-mindedness	63.26*	14.83	r = -.29**
# of Ed Courses	3.93	6.04	

\*Mean derived from scores obtained on the teachers' first day of employment.

\*\*Significant at the .05 level of confidence.

The research hypothesis that there is a positive relationship between open-mindedness and the number of education courses was supported at the .05 level of confidence.

#### Hypothesis IX

There is a positive relationship between the open-mindedness and the level of education.

TABLE XIII  
CORRELATION BETWEEN OPEN-MINDEDNESS  
AND LEVEL OF EDUCATION

	Mean	Standard Deviation	Correlation
Open-mindedness	63.26 *	14.83	r = -.33 **
Level of Education	4.60	1.83	

\*Mean derived from scores obtained on the teachers' first day of employment.

\*\*Significant at the .01 level of confidence.

The research hypothesis that there is a positive relationship between open-mindedness and the level of education was supported at the .01 level of confidence.

Summary of the Hypothesis

Hypothesis	Results
1. Group I will show a greater positive change in expressed confidence level for teaching than Group II and III.	The research hypothesis that Group I will show greater positive change in confidence was not supported at the .05 level of confidence.
2. Group I will show a greater positive change in open-mindedness than Group II and III.	The research hypothesis that Group I will show greater positive change in open-mindedness was not supported at the .05 level of confidence.
3. There is a positive relationship between the expressed confidence level for teaching and open-mindedness.	The research hypothesis that there is a positive relationship between confidence and open-mindedness was supported at the .05 level of confidence.
4. There is a positive relationship between the expressed confidence level for teaching and the number of years of prior teaching experience.	The research hypothesis of a positive relationship between confidence and teaching experience was supported at the .05 level of confidence.
5. There is a positive relationship between the expressed confidence level for teaching and the number of professional education courses completed.	The research hypothesis of a positive relationship between confidence and education <sup>1</sup> courses was not supported at the .05 level of confidence.
6. There is a positive relationship between the expressed confidence level for teaching and the level of education.	The research hypothesis of a positive relationship between confidence and level of education was not supported at the .05 level of confidence.
7. There is a positive relationship between the open-mindedness and the number of years of prior teaching experience.	The research hypothesis of a positive relationship between open-mindedness and teaching experience was supported at the .01 level of confidence



8. There is a positive relationship between the open-mindedness and the number of professional education courses completed.
9. There is a positive relationship between the open-mindedness and the level of education.

The research hypothesis of a positive relationship between open-mindedness and education courses was supported at the .05 level of confidence.

The research hypothesis of a positive relationship between open-mindedness and level of education was supported at the .01 level of confidence.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Four major topics are discussed in the final chapter: a summary of the investigation; conclusions; implications of the study; and recommendations for further research.

#### Summary

The purpose of this study was to examine attitudinal changes in open-mindedness of teachers and confidence for teaching. In addition, the relationships of these factors to years of teaching experience, level of education, and completed number of education courses were investigated. The length of the faculty induction program was also addressed.

Seventy-two teachers from three Michigan Area Vocational Centers participated in the investigation. The Confidence Level Inventory for Teaching and the Rokeach Dogmatism Scale was administered to the teachers three times: on their first day of work; after teaching three weeks; and after teaching six weeks.

Two of the nine hypotheses were tested for change in questionnaire scores. The statistical analyses of Hypotheses I and II indicated that teachers became more open-minded and more confident about their teaching during the repeated measures testing but the rate

of change among the three schools was not significantly different at the .05 level of confidence.

The analysis for Hypothesis I, however, did reveal at the .05 level of confidence a significant difference in confidence for teaching among the three teacher groups, irrespective of the three testing times ( $F = 5.93$ ). Also, the analysis for Hypothesis II disclosed a significant difference at the .05 level of confidence in open-mindedness among testing times, irrespective of the three teacher groups ( $F = 4.06$ ).

The remaining seven research hypotheses were tested for relationships among the two questionnaire scores and the three selected background data factors. Significant relationships were found between: educational level and years of teaching experience ( $r = .27$ ); number of education courses and years of teaching experience ( $r = .30$ ); number of education courses and education level ( $r = .55$ ); open-mindedness and years of teaching experience ( $r = .30$ ); open-mindedness and education level ( $r = .33$ ); open-mindedness and number of education courses ( $r = .29$ ); confidence for teaching and years of teaching experience ( $r = .27$ ); confidence for teaching and open-mindedness ( $r = .24$ ).

### Conclusions

Within the limitations of the study, the following conclusions seem reasonable based on the findings:

1. Vocational education teachers will become more open-minded through orientation and classroom teaching. The total sample displayed a significant change in open-mindedness during the time periods addressed in the study.

In examining these changes more closely, the test scores revealed that teachers achieved a 5% increase in open-mindedness from the first day of work through six weeks of teaching with 3% of the gain occurring during the first three weeks of teaching.

2. Vocational education teachers vary considerably in their confidence for teaching. A significant difference existed in the confidence for teaching test scores among the three teacher groups irrespective of time. On the first day of work, Group II showed the highest mean score (199.2) whereas Group III achieved the lowest (174.6) which is a spread of 24.6 score points between the two means. These differences among groups could be explained by varying school policies and practices in areas such as: teacher selection criteria; program offerings; and the atmosphere created by job interviews plus the first orientation day.
3. Vocational education teachers do not significantly alter their confidence for teaching in the short run. Although a significant difference did not exist in the confidence for teaching test scores among the three teacher groups when the interaction of the three time periods was considered, the results are worth noting. (PLEASE REFER TO CHAPTER IV, FIGURE I). Group I experienced a steady growth in CLIT scores reaching a 7% increase by the final testing time. Group II showed a minor steady decrease of 2%. Group III experienced a 6% increase in CLIT scores from testing time one to two, followed by a 4% decrease from testing time two to three, resulting in an overall 1% increase.
4. The data do not support the notion that the length of orientation for vocational education teachers affects their open-mindedness and confidence for teaching. However, there appears to be a slight positive relationship between the length of each school's orientation program and the percentage change in CLIT scores from testing time one to three. Table I depicts the relationship.

TABLE I  
RELATIONSHIP BETWEEN LENGTH OF ORIENTATION  
AND CLIT SCORES

Group	Length of Orientation Program	CLIT Scores
		Overall % Change From Test 1 to 3
Group I	22 days	7% increase
Group II	7 days	2% increase
Group III	12 days	1% increase

5. Open-mindedness of vocational education teachers is positively related to years of teaching experience, educational level, number of education courses taken, and confidence for teaching.
6. Confidence for teaching of vocational education teachers is positively related to years of teaching experience. However, confidence for teaching does not have a significant relationship to the educational level or the number of education courses taken.

#### Implications

The investigation of confidence for teaching and open-mindedness offers a new dimension to vocational education research. The findings of this study suggest possible interpretations of confidence for teaching, open-mindedness, and selected background factors and their relevance to teacher role adjustment and length of induction programs.

The vocational education teachers participating in the study indicated unusually high self-ratings on the Confidence Level Inventory for Teaching (CLIT) when compared to other studies that assessed

confidence for teaching. Czajkowski's<sup>1</sup> elementary student teachers had a mean score of 139.5 on the pre-test and Smith's<sup>2</sup> music student teachers scored a mean of 168.9 whereas this study obtained a mean of 192.7. However, the mean scores on the Rokeach Dogmatism Scale were comparable with other studies.

It is estimated that the high confidence for teaching scores can partially be attributed to vocational education teachers' knowledge of the subject matter to be taught which would be true of music student teachers as well and may account for the scores being higher than those of general elementary student teachers. Vocational education teachers also have had work experience in the field they teach which may further enhance confidence for teaching. The CLIT items represent broad aspects of teacher role and describe teaching as a composite of general simplified behaviors. New vocational education teachers may be unable to perceive implicit competencies required to perform such general behaviors and may rate themselves spuriously high.

A school could greatly enhance the structuring of an induction program to the needs of its new teachers by administering such self-rating instruments as the Confidence Level Inventory for Teaching and the Rokeach Dogmatism Scale on the first day. An item analysis of

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<sup>1</sup>Theodore J. Czajkowski, "Relationship of Confidence for Teaching to Selected Personal Characteristics and Performance of Student Teachers" (Unpublished Ed.D. dissertation, Michigan State University, 1968), 70.

<sup>2</sup>Martha L. Smith, "A Study of Elementary Student Teacher Confidence in and Attitudes Towards Music and Changes That Occur in a Student Teaching Experience" (Unpublished Ph.D. dissertation, Michigan State University, 1969), 91.

the CLIT could lead to tailoring an induction program to group as well as individual needs in areas of perceived weakness and unrealistic confidence. It seems that such measures would greatly assist in teacher role adjustment. Of the three schools included in this study, Group I was the only one to show a continued gain in CLIT scores. Group I had the longest induction program. Furthermore, intensive sessions on methods of teaching were included in the program. Such increases in CLIT scores may be partially attributed to the length of the induction program and even the quality (which was beyond the scope of this study).

In addition, implications are provided for vocational education teacher selection and employment criteria. Other studies, as discussed in the related research, have indicated a positive correlation between confidence and teacher effectiveness. In this study traditional background factors usually associated with teaching success were not found among many of the participants. A majority of them had less than a college degree, no education courses, and no previous teaching experience. (PLEASE REFER TO CHAPTER II, TABLES I, II AND III). Yet the self-confidence deemed as a necessary prerequisite for success was present as indicated by the CLIT scores. Apparently, such background factors may not be important criteria and perhaps should not be weighted heavily in the selection process of vocational education teachers.

#### Recommendations for Further Research

This study was designed as an exploratory effort to examine confidence for teaching and open-mindedness as variables in the role adjustment of vocational education teachers. Further research that

may support the research hypotheses and/or extend the findings of this study could provide useful information for vocational education.

On this basis the following recommendations are made:

1. Increased understanding of the factors that influence confidence for teaching is necessary. Future investigation of role adjustment should examine additional attitudes and background factors. In order to better understand the relationship of confidence for teaching to personality dimensions, more evidence is needed.
2. Replication of the investigation is needed. It should include vocational education teachers in various settings rather than exclusively using the Area Vocational Centers. A large sample is strongly encouraged, and random selection of both subjects and teaching situations should be used. It is further recommended that the population be comprised of only first-year vocational education teachers.
3. Studies of the relationships between confidence for teaching, open-mindedness and vocational education teacher effectiveness are suggested. Although research has supported these relationships for other teaching levels and disciplines, such conclusions cannot automatically be assumed applicable to vocational education teachers. Research of this nature would have additional implications for certification requirements.
4. Research analyzing induction programs for vocational education teachers in length and content would be extremely valuable. Findings would have meaningful implications for the structuring of induction programs to better assist new vocational education teachers in their role adjustments.



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## APPENDICES

**APPENDIX A**  
**TEACHER BACKGROUND INFORMATION FORM**



APPENDIX A

Research is being conducted by Michigan State University to determine vocational education teachers' attitudes. In order to develop a better understanding of some of the problems of teachers in new situations and to provide more effective teacher preparation we are soliciting responses from all faculty at Area Vocational Centers opening this fall in Michigan. Your cooperation in answering the following questions will be greatly appreciated. Please respond carefully and as honestly as possible. Your answers will be confidential and in no way reflect personal evaluation.

1. Name \_\_\_\_\_
2. Subject you teach \_\_\_\_\_
3. Area Vocational Center where you teach \_\_\_\_\_
4. Number of education courses you have taken \_\_\_\_\_
5. Highest level of education you have completed \_\_\_\_\_
6. Number of years of prior teaching experience:
  - a. Public \_\_\_\_\_
  - b. Other (please specify) \_\_\_\_\_
7. Have you had any previous involvement with youth groups?
  - a. Girl/boy scouts \_\_\_\_\_
  - b. Church school \_\_\_\_\_
  - c. Other (please specify) \_\_\_\_\_  
\_\_\_\_\_

APPENDIX B

CONFIDENCE LEVEL INVENTORY FOR TEACHING

APPENDIX B

## DIRECTIONS:

The following scale is designed to help us discover some of your feelings about a number of teaching areas. Use one of the ten possibilities for each item below.

- 1 - 2 I feel extreme concern about my abilities in this area.
- 3 - 4 I feel greater than average concern about my abilities in this area.
- 5 - 6 I feel average concern about and have average confidence in my abilities in this area.
- 7 - 8 I feel relatively confident about my abilities in this area.
- 9 - 10 I feel extremely confident about my abilities in this area.

## MANAGING INSTRUCTION

- \_\_\_\_\_ Adapting instruction to changing needs of pupils and class.
- \_\_\_\_\_ Dealing appropriately with unexpected situations as they develop.
- \_\_\_\_\_ Recognizing the need for re-teaching at appropriate intervals.
- \_\_\_\_\_ Working effectively with pupils of small groups.
- \_\_\_\_\_ Developing effective processes of problem solving and critical thinking on the part of pupils.
- \_\_\_\_\_ Developing a questioning attitude and intellectual curiosity in pupils.
- \_\_\_\_\_ Directing and managing daily instruction so that pupils are interested, motivated, and shown a desire to learn.

## PROFESSIONAL QUALITIES

- \_\_\_\_\_ Having a sincere enthusiasm for the job.
- \_\_\_\_\_ Seeking opportunity to assume responsibility.



## PLANNING FOR INSTRUCTION

- \_\_\_\_\_ Recognizing individual differences in evaluating pupil performance.
- \_\_\_\_\_ Considering sequence and continuity of pupil experiences as key factors in learning.
- \_\_\_\_\_ Planning thoroughly for short-term (daily) and long-term (unit or project) work.
- \_\_\_\_\_ Selecting appropriate teaching materials and having them immediately available for use when needed.
- \_\_\_\_\_ Consistently reading, studying, and gathering information for teaching plans.

## WORKING WITH PEOPLE

- \_\_\_\_\_ Communicating effectively with parents.
- \_\_\_\_\_ Gaining confidence and respect of pupils.
- \_\_\_\_\_ Maintaining reasonable levels of expectations from pupils.

## COMMAND OF SUBJECT AND TEACHING MATERIALS

- \_\_\_\_\_ Seeking help and suggestions from specialists and consultants in subject areas where needed.
- \_\_\_\_\_ Showing persistence in seeking information and knowledge from many sources in teaching subjects.

## ESTABLISHING CLASSROOM CLIMATE

- \_\_\_\_\_ Moving to specific learning activities as group shows readiness.
- \_\_\_\_\_ Working in such a manner that individual pupils seek help with personal problems.
- \_\_\_\_\_ Involving pupils in appropriate decision-making situations.
- \_\_\_\_\_ Demonstrating judiciousness and fairness with all pupils.
- \_\_\_\_\_ Adjusting appropriately between a permissive and authoritative manner in classroom situations.

**APPENDIX C**

**ROKEACH DOGMATISM SCALE**

APPENDIX C

**DIRECTIONS:** You will read below some statements people have made as their opinion on several topics. You may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many other people feel the same as you do.

We want your personal opinion on each statement. When you read each one, first indicate whether, in general, you agree or disagree with it:

In column I mark (+) or (-):

+ = agree

- = disagree

Then indicate how strongly you agree or disagree:

In column II mark 1, 2, or 3:

Agree

Disagree

1. Agree a little

1. Disagree a little

2. Agree on the whole

2. Disagree on the whole

3. Agree very much

3. Disagree very much

I      II

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 1. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.        |
| _____ | _____ | 2. My blood boils whenever a person stubbornly refuses to admit he's wrong.   |
| _____ | _____ | 3. There are two kinds of people in this world: those who are for truth and those who are against the truth.                              |
| _____ | _____ | 4. Most people just don't know what's good for them.  |
| _____ | _____ | 5. Of all the different philosophies which exist in this world there is probably only one which is correct.                               |
| _____ | _____ | 6. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent. |
| _____ | _____ | 7. The main thing in life is for a person to want to do something important.  |
| _____ | _____ | 8. I'd like it if I could find someone who would tell me how to solve my personal problems.   |
| _____ | _____ | 9. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.   |
| _____ | _____ | 10. Man on his own is a helpless and miserable creature.  |

- \_\_\_ 11. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- \_\_\_ 12. Most people just don't give a "damn" for others.
- \_\_\_ 13. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
- \_\_\_ 14. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- \_\_\_ 15. The PRESENT is all too often full of unhappiness. It is only the FUTURE that counts.
- \_\_\_ 16. The United States and Russia have just about nothing in common.
- \_\_\_ 17. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- \_\_\_ 18. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.
- \_\_\_ 19. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- \_\_\_ 20. It is better to be a dead hero than to be a live coward.