Fall 8-1992

Perceived Importance of Effective Teaching Competencies Used in Secondary Education and a Comparison of Usage Between General and Vocational Secondary Teachers

Leroy Eldon Sayer

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PERCEIVED IMPORTANCE OF EFFECTIVE TEACHING COMPETENCIES USED IN SECONDARY EDUCATION AND A COMPARISON OF USAGE BETWEEN GENERAL AND VOCATIONAL SECONDARY TEACHERS

by

Leroy Eldon Sayer

A THESIS

Presented to the Faculty of

The Graduate College in the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Master of Science

Major: Agricultural Leadership, Education, and Communication

Under the Supervision of Professor Leverne Barrett

Lincoln, Nebraska

August, 1992
The purpose of this study was to identify and rank effective teaching competencies by secondary vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors, and to determine if there was a difference in teaching effectiveness between secondary vocational and general secondary teachers as measured in the classroom, utilizing the COKER (Classroom Observations Keyed for Effectiveness Research).

An instrument was constructed from a variety of sources, primarily from the University of Toledo competency indicators as noted by Medley, Coker, and Soar (1984). This list of 28 competencies was completed by secondary vocational teachers from selected high schools within 150 miles of Lincoln, Nebraska. General secondary teachers were selected from classes of the first summer session (1987) at the University of Nebraska-Lincoln. Nebraska State Department of Education personnel and vocational
staff members at the University of Nebraska-Lincoln also completed this survey.

Frequencies, ranges, means, standard deviations, and rank were determined for the sample. Using the SPSS-X, means (T-values and probabilities) were obtained.

Means, F-values, and probabilities were obtained from the COKER using the SAS program. Secondary vocational teachers participating in the survey and general secondary teachers from Newman Grove and Tilden-Elkhorn Valley High Schools were observed in their classes.

The results indicated there were differences in the scores given to effective teaching competencies. The results also indicated there were differences in teaching effectiveness demonstrated in the classroom between secondary vocational teachers and general secondary teachers.
DEDICATION

To the memory of my parents, Mr. and Mrs. William Sayer, who never doubted that I would obtain a college degree.
ACKNOWLEDGMENTS

The author would like to take this opportunity to express his appreciation to those who have given their guidance, assistance, and, most importantly, their patience in completing this study.

I wish to express my appreciation to my wife, Barb, for her patience and devotion to me and my educational pursuits.

To my children, Jacci, Dan, and Audrey, for their understanding when I was unable to give them time. To Bob and Joyce Stear for their support and encouragement and for being wonderful parents-in-law.

To my advisor, Dr. Leverne Barrett, I owe a great deal of gratitude for his guidance, and, most significantly, for his unending patience.

I owe thanks to Mike Adeline and Larry Andelt for their technical assistance and to Cynthia Rotter-Hansen for her reviews.

Special thanks go to my graduate committee members, Dr. Allen Blezek and Dr. Joyce Povlacs Lunde.

L.E.S.
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CHAPTER I

INTRODUCTION

Education is currently under the watchful eye of the public. Declining student test scores are alarming. A large portion of the nation's tax revenue is spent on educational facilities, equipment, materials, and instruction. Not everyone agrees on the reasons for the decline in test scores, but some critics have suggested that it may be the quality of instruction.

One way a school system can begin to improve instruction is to effectively evaluate instruction. Most school administrators evaluate instruction in some form or another.

Teachers may be evaluated by student achievement, student evaluation of teachers, or administrators' appraisals. Is it more important to possess skills or have acquired certain knowledge? Is the worth teachers measured by how they perform in the classroom? In other words, do teachers achieve results? Teachers are asked not only to present information, but to help students grow in creativity, curiosity, social adjustment, problem solving, and responsibility; teachers are also asked to help students develop a good attitude toward classmates and their school. The accomplishment of these goals has a greater chance if teachers use effective teaching competencies.
Statement of the Problem

Many studies have been completed on effective teaching, but limited information is available for effective teaching behaviors that are relevant to the vocational setting. Educators at all levels have not clearly identified effective teaching competencies for secondary vocational educators, nor have researchers used teaching competencies to compare vocational secondary teachers with general secondary teachers. The problem addressed in this study was to attempt to determine the behaviors deemed most important by general secondary teachers, vocational secondary teachers, teacher educators, and state department personnel.

Objectives of the Study

The objectives of the study were to: (1) identify and rank effective teaching competencies by secondary vocational teachers, general secondary teachers, teacher educators, and state department of education supervisors; and (2) determine if there was a difference in teaching effectiveness between secondary vocational and general secondary teachers as measured in the classroom by utilizing the COKER (Classroom Observations Keyed for Effectiveness Research).
Significance of the Study

Assumptions have often been made as to what constitutes effective teaching. Do secondary vocational teachers and other educational groups know which teaching effectiveness behaviors are most important? What have current researchers indicated to be the best teaching behaviors?

A large number of behaviors and competencies have been identified for classroom teachers in various research studies. These behaviors have formed the basis of many teacher evaluation instruments. Are these teaching competencies acceptable for evaluating vocational teachers? If there are unique behaviors for vocational teachers, it is essential they be identified and considered in evaluating vocational teachers.

Limitations of the Study

This study was limited to (1) selected public secondary vocational teachers from schools within 150 miles of Lincoln, (2) Nebraska Department of Education personnel, (3) selected members of the staff of the Vocational Education and Agricultural Education Departments at the University of Nebraska-Lincoln campus, (4) selected general secondary teachers attending first summer session classes at the University of Nebraska-Lincoln, and (5) teachers from Newman Grove and Elkhorn Valley-Tilden High Schools.

Definition of Terms

In their discussion of measurement-based teacher evaluation, the following definitions were used by Medley, Coker, and Soar (1984).
Low-inference observation. Observation requiring only a tabulation of observed behaviors.

High-inference observation. Observation requiring an inference by the observer, such as a traditional checklist.

Teacher competency. A specific knowledge, ability, or value position that a teacher either possesses or does not possess, which is believed to be important to success as a teacher.

Teacher performance. What the teacher does on the job; teacher performance is defined in terms of teacher behavior under a specified set of conditions.

Teacher effectiveness. The results a teacher receives; teacher effectiveness is defined in terms of what pupils do, not what the teacher does or can do.
Dunkin and Biddle (1974) found that more than 10,000 research studies had been completed on the topic of effective teaching in the twenty years prior to their study. It is safe to assume that this total is much larger at the present time. Even with such a large amount of data generated, there was still a great difference of opinion in the findings.

Soar, Medley, and Coker (1984) referred to an early study by Barr (1948). In Barr's research on teaching characteristics, an effort was made to distinguish effective from less effective teachers; Barr did not attempt to identify best teaching practices. In his review of literature, Barr showed that the majority of studies prior to 1948 used supervisors' ratings as the measure of teacher effectiveness.

Paese and Hodge (1990) studied the effects of peer evaluation; the authors believed peer evaluation was better than administrator evaluation, due to greater acceptance by the teacher.

Is there a basis for student evaluation of teachers? According to West and Denton (1991), "... studies indicate secondary students can assess accurately teaching performance." West and Denton continued, "Substantial correlations between students' ratings and university classroom supervisors' ratings of teachers' classroom performance have been reported."

Soar et al. (1984) described a few other methods of teacher evaluation, such as teachers' scores on written tests. They stated that "paper and pencil" tests such as the National Teacher Examination (NTE) are not new to
education. The concern over the quality of the teacher is not a new topic; rather, time has increased the variety of viewpoints of methods to measure teacher effectiveness.

Differing Views/Methods

Soar et al. (1984) gave considerable attention in their discussion of the various methods of evaluating teacher effectiveness. They referred to tests such as the National Teacher Examination, achievement test scores of students in the teacher's classroom, and ratings of teacher performance in the classroom. It has been noted that not all teachers are evaluated. According to Griffith (1973), in a survey completed for the National Education Association, 20 percent of the secondary school probationary teachers received no observation during the one-year period. The refusal of administrators and supervisors to perform observation may be attributed to a variety of reasons, such as (1) uncertainty of what to observe, (2) lack of skills needed to evaluate, and (3) lack of an appropriate instrument.

It would be appropriate at this point to discuss why effective teaching or effective teachers need to be identified. Boak and others (1983) listed four main reasons for evaluation:

1. To give individual faculty members feedback on their teaching primarily as an aid for improving their future teaching performance.
2. To give administrators information as a basis for making tenure, promotion, and merit increment decisions.
3. To provide published information for student use in course selection.
4. To provide research data for instructional and educational research projects.

Boak and others (1983) also referred to some reasons for evaluation given by other researchers:

1. To protect student from incompetent teachers.
2. To protect the teacher from arbitrary administrative decision making.
3. To reward superior performance through the public identification of outstanding teaching.

Given the various needs given by researchers for evaluation, which method of process is best? Soar et al. (1984) stated that NTE scores did not predict success in teaching. Many researchers, such as Altbach, Kelly, and Weis (1985), have believed that teacher exams have an adverse impact on the hiring of minority teachers. Some states, such as Tennessee, have a comprehensive career teacher plan, utilizing the NTE in part.

Doyle (1985) reported that in some states, such as Tennessee, California, and others, educators believe so strongly in identifying effective teachers that merit pay is given, ranging from $3000 to $7000 annually. Teacher exams usually measure (1) basic skills such as math, English, and science, (2) professional skills, and or (3) knowledge of a particular subject matter. Soar et al. (1984) believed these tests would be best utilized at a preservice or entry program for prospective teachers.

According to Martin (1987), a Gallop Poll taken in the spring of 1986 discovered that 85 percent of the public favored competency tests for
teachers. Martin stated, "... currently, 38 states test or plan to test competence in some way."

Is there a correlation between measured teacher intelligence and student achievement? Soar et al. (1984) stated the median correlation between a teacher's personal characteristics and gains in student achievement as a measure of teacher effectiveness for all such studies was only .03. The authors continued by saying that if student learning is the outcome sought, researchers have failed to support a teacher's intelligence as a criterion for evaluation.

There has been much debate over using student achievement as a basis on which to evaluate teachers. Soar et al. (1984) addressed the fact that student abilities vary to a great extent. They reported that a review of studies revealed a high correlation (.40 to .70) between pupils' intelligence and their achievement, depending on grade level. According to the authors, other factors should be addressed, such as the home background of the student. If student achievement scores are used as a basis for teacher evaluation, they felt teachers would concentrate on improving test scores of the students. Other problems may arise, according to Soar et al., such as a teacher concentrating on a particular subgroup of students, if top scores of students are used in teacher evaluation.

Soar (1966) believed that a student's "... intellectual, personal, and social growth" are all factors to be considered. He believed that it is difficult to evaluate from only one aspect of a teacher's characteristics. Soar stated that "... when these ratings have been compared with change in pupils, no relationships have been found." He continued, "... what is needed are more
objective, more refined, and yet more comprehensive measures of teacher-pupil behavior in the classroom rather than ratings of it."

Another method of identifying effective teaching is observing the teaching process. Realizing there are a large number of observation methods or instruments, it would be appropriate to list the reasons given by Griffith (1973) for not utilizing the observation method:

1. Classroom observation is difficult.
2. Classroom observation is time-consuming.
3. Teachers dislike being observed.
4. Administrators and principals dislike classroom visits.
5. Classroom observation is not required.

Martin (1987) studied the basis of different groups for teacher evaluation. Martin stated:

Across the nation there has been a strong correlation between competency of students and competency testing of teachers. Where incompetency is found in students, many conclude, rightly or wrongly, that this implied incompetent teaching. As an example, New Jersey has for a number of years given minimum a basic skills test in reading and mathematics to pupils at grade level 3, 6, 9, and 11. In year 1980, there were over 175 schools that had large numbers of pupils who failed the test. It was not much later that the attention began to focus on the teachers themselves.

Griffith (1973) believed that teachers should be observed (1) to find out what learning activities students are engaged in and to appraise their value; (2) to encourage and assist teachers to teach more effectively; and (3) to find out whether courses of study are related to students' needs and abilities and contributive to the goals of education.
Griffith (1973) continued by giving additional reasons for observations: (1) to provide follow-up assistance to teachers; (2) to benefit the supervisor because he or she learns where good teaching is going on and can recommend that others (teachers) observe this teacher; and (3) because administrative changes may be desirable.

Cogan (1973) cited three major reasons to observe classroom teachers: (1) the behavior of the teacher, (2) the behavior of the students, and (3) other events occurring in class. Cogan believed that all aspects of observation are needed. He noted that supervisors tend to observe the teacher and not other aspects of the teaching process.

A Basis for Classroom Observation

There are many systems available for observing classroom teachers, most of which were developed since 1950. Many additions and refinements have been made with these instruments. Obviously, with recent research, more evaluators have ventured into the classroom. Griffith (1973) noted that prior to 1925, classroom observation and supervision were synonymous, which is not the case today. He continued, "... supervision, a broad concept, involves all the factors which affect teaching and learning ... includes curriculum, teachers and their methods, and students and their learning activities. As mentioned earlier by Griffith, 20 percent of the secondary school probationary teachers received no observation for the year preceding his study, while 42 percent of the tenured secondary teachers received a classroom observation during the same period.
Medley et al. (1984) contended that, regardless of teacher competence or the pre-existing abilities, it is imperative that the teacher be evaluated on performance "... in a specific setting--with a particular class, in a particular school, in a particular community."

Methods of observation and instruments used to measure effective teaching behaviors vary. Wiersma and others (1983) studied two teacher-effectiveness instruments: the COKER (Classroom Observations Keyed for Effective Research) and the TPAI (Teacher Performance Assessment Instrument). They found similarities in evaluation methods. The COKER is a low-inference instrument; that is, the COKER simply observes the teacher and students for the presence of a particular behavior. The TPAI is a high-inference instrument that observes certain behaviors, but places a numerical value on the teacher's application of that behavior. Wiersma and others went on to state that "presently, indications are that the jury is still out as to the better approach." The low-inference instruments reduce the value judgment needed by the evaluator, thus reducing biases and probability of error.

Mireau (1986) stated that evaluators should initially use a low-inference system and then move to a high-inference coding system. She noted that observation requires experience, and an effective observer must have "a good set of interpersonal skills."

In appraising any instrument, care must be given to evaluating what the instrument is measuring. Boak and others (1983) stated that "an individual begins with some model of what a good teacher does in a classroom." Variations are inherent in any instrument, such as which
behaviors describe good teaching and what method of measurement or rating is to be applied, such as low- or high-inference.

**Observable Effective Teaching Competencies**

In separating folklore from fact, many researchers have completed studies in which lists of effective teaching behaviors have been developed. The researchers have indicated behaviors needed for certain ages of students, subject matter areas, and various school settings. Troisi (1983) reviewed several studies when developing or identifying certain behaviors that are indicative of effective teaching. Troisi noted the relationship between teaching effectiveness and school characteristics, classroom management, teacher expectations, school climate, learning time, and learning/cognitive style. Medley et al. (1984) listed four key steps in developing and utilizing observable behaviors:

1. Setting, defining, or agreeing upon a task to be performed.
2. Making a documentary, quantifiable record of the behavior of the candidate while the task is performed.
3. Quantifying the record; that is, deriving a score or set of scores from it.
4. Comparing the scores with the predetermined standard.

It is critical that supervisors and teachers understand the task or behaviors to be observed. Some authors, such as Duckett (1985), presented a list of such competencies; however, not all items on their lists reflected "observable" competencies. Classroom observation requires evaluating only those competencies that can be observed. Coker (1982) listed twelve
competencies that were developed for music teachers. Rheault and Miller (1986) offered a list of competencies that a successful agriculture teacher should possess, including observable and nonobservable competencies. It can be assumed there may be unique competencies for various classroom settings and/or courses. Rheault and Miller found, for example, that the effective vocational agriculture teacher was older than the average teacher and had a proportionate amount of teaching experience. This is, of course, not an observable behavior; however, do observable behaviors exist in differing groups of teachers? Behaviors can be identified by juries of experts, experienced teachers, and others. There are behaviors which may be thought to be more important than other behaviors for a given subject matter area.

**Summary**

In summary, the effectiveness of a teacher is based upon performance; that is, do they exhibit those competencies deemed necessary in their area of instruction? Many believe, such as Coker (1982), that in order to demonstrate that a behavior has an effect on learning, it must "be observed in an instructional context." It is important that teachers have certain characteristics, but these should be tested before a teacher enters a preservice training period. Once this is noted, then it is important to proceed in developing those competencies necessary for success in the classroom.
CHAPTER III

DESIGN OF THE STUDY

The study was designed to determine the teaching competencies deemed most important for vocational teachers to possess. Two major objectives were addressed in the study. The first objective was to identify and rank effective teaching competencies by vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors. The second objective was to determine differences in teaching effectiveness between secondary vocational and general secondary teachers as measured in the classroom by use of the COKER (Classroom Observations Keyed for Effectiveness Research).

Population

The population for this study consisted of selected secondary schools offering vocational education within 150 miles of Lincoln, Nebraska; members of the staff of the Vocational Education and Agricultural Education Departments at the University of Nebraska-Lincoln; Nebraska Department of Education supervisors; and selected general secondary teachers attending the University of Nebraska-Lincoln during the first summer session of 1987. The second portion of the study utilized classroom observations of the secondary vocational teachers mentioned above and secondary teachers from two additional high schools. The listing of the participants by school and institution is shown in Table 1.
Table 1

Listing of Participants by School/Institution

<table>
<thead>
<tr>
<th>General Secondary Vocational Teacher Educators of Education</th>
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<td>State Teacher Teachers Department of Education</td>
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<th>Participants for First Objective</th>
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<tr>
<td>Tekamah-Herman High School</td>
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<td></td>
</tr>
<tr>
<td>Crete High School</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Fairbury High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Battle Creek High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lyons-Decatur Northeast High School</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Milford High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>University of Nebraska-Lincoln teacher educators</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Nebraska Department of Education supervisors</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>First summer session, 1987</td>
<td>29</td>
<td></td>
</tr>
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<td>Total</td>
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<td>24</td>
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Table 1 (continued)

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<td>Syracuse-Dunbar-Avoca High School</td>
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<td></td>
</tr>
<tr>
<td>Fairbury High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Battle Creek High School</td>
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<td>Lyons-Decatur Northeast High School</td>
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</tr>
<tr>
<td>Milford High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Seward High School</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Newman Grove High School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Tilden-Elkhorn Valley High School</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>25</strong></td>
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Selection of Sample

For the first objective, secondary high schools were randomly selected with 24 vocational secondary teachers selected from these schools. Twenty-nine academic teachers were selected from Dr. James O. Walter's summer session class in 1987 to complete the survey instrument utilized in this study. Six Nebraska Department of Education supervisors and nine University of Nebraska-Lincoln faculty members from the Vocational and Agricultural Education Departments were also surveyed.

For the second objective, nine general secondary teachers from two northeast Nebraska schools were observed in the classroom. This group was compared to 25 vocational teachers from selected high schools (see Table 1).

Hypotheses

Null Hypothesis 1

There are no differences in the rank of effective teaching competencies by vocational teachers, general secondary teachers, teacher educators, or State Department of Education supervisors.

Null Hypothesis 2

There are no differences in teaching effectiveness scores demonstrated in the classroom between secondary vocational teachers and general classroom teachers.
Preparation of the Instrument

This study utilized two instruments. One instrument (see Appendix A) was a survey constructed from several sources. These sources included competencies from Coker's (1982) COKER User's Manual (Classroom Observation Keyed for Effectiveness Research); Rhealt and Miller's (1986) paper (A Profile of the Effective Vocational Agriculture Teacher); a study by Wiermsa and others (1983) of the COKER and the TPAI (Teacher Performance Assessment Instrument); and from conferences with Agricultural Leadership Education and Communication staff at the University of Nebraska-Lincoln.

The first instrument, as seen in Appendix A, consisted of 28 effective teaching competencies. Respondents were asked to rate each of these competencies numerically: (1) not important, (2) little importance, (3) moderately important, (4) important, and (5) very important.

Respondents were asked for information concerning graduate credit hours and years of experience. They were also asked to list additional competencies they believed to be important.

Effective teaching competencies were selected from several sources. The primary source was the University of Toledo competency indicators compiled by Medley, Coker, and Soar (1984). Three major areas were identified in this list:

Area I: Instructional Strategies, Techniques, and/or Methods
Area II: Communication with Learners
Area III: Learner Reinforcement-Involvement
Student teachers at the University of Toledo were expected to demonstrate the following competencies:

**Area I: Instructional Strategies, Techniques, and/or Methods**

1. Uses a variety of instructional techniques.
2. Uses convergent and divergent inquiry strategies.
3. Develops and demonstrates problem-solving skills.
4. Establishes transitions and sequences in instruction which are varied, logical, and appropriate.
5. Modifies instructional activities to accommodate identified learner needs.
6. Demonstrates ability to work with individuals, small groups, and large groups.
7. Structures the use of time to facilitate student learning.
8. Uses a variety of resources and materials.
9. Provides learning experiences which enable students to transfer principles and generalizations outside of school.

**Area II: Communication with Learners**

10. Provides group communication experiences for students.
11. Uses a variety of functional verbal and nonverbal communication skills with students.
13. Motivates students to ask questions.
14. Uses questions that lead students to analyze, synthesize, and think critically.

15. Accepts varied student viewpoints and/or asks students to extend or elaborate answers or ideas.

16. Demonstrates proper listening skills.

17. Provides feedback to learners on their cognitive performance.

**Area III: Learner Reinforcement-Involvement**

18. Maintains an environment in which students are actively involved, working on-task.

19. Implements an effective classroom management system for positive student behavior (discipline).

20. Uses positive reinforcement patterns with students.

21. Assists students in discovering and correcting errors and inaccuracies.

22. Develops student feedback, evaluation skills, and student self-evaluation.

Fourteen competency indicators utilized in a study of gains in competence by student teachers at Georgia State University are shown below:

1. Demonstrates enthusiasm for teaching and the topics being taught.

2. Provides opportunities for success experiences by students.

3. Demonstrates patience, empathy, and understanding.
4. Identifies learning styles, rates of learning, and capabilities of students.

5. Demonstrates understanding of processes involved in selection of learning content and methods.


8. Maintains student involvement in learning tasks.

9. Uses activities which call for pupil planning, observing, describing, experimenting, and writing.

10. Organizes and uses a variety of appropriate instructional materials and equipment.

11. Uses a variety of cognitive levels in strategies of questioning.


13. Manages disruptive behavior constructively.

14. Helps students recognize progress and achievements.

The following list, entitled the Medley Competencies, were developed from research by Medley, Coker, and Soar (1984). These competencies were then utilized in the COKER.

1. When teachers work with large groups rather than small groups, student gain is more likely to occur.

2. When small groups work with adult supervision, gain is less likely to occur.

3. Seatwork by the student is more effective when there is an appropriate balance between teacher focusing and structuring and student choice of either what, how, and when.
4. An increase in structure academic time is associated with greater student gain.

5. When students initiate verbal interactions, gain is less likely in lower grades but more likely in intermediate and higher grades.

6. Student correct substantive responses to teacher questions are related to greater student gain.

7. High cognitive level questions relate negatively to student gain and low cognitive level questions relate positively to student gain, even for complex learning outcomes.

8. When teachers amplify and discuss student responses, high-socioeconomic status students tend to show greater gain than do low-socioeconomic status students.

9. Teacher hostility and rebuking behavior relates negatively to student gain.

10. Disruptive student behavior is negatively associated with student gain.

11. Student involvement (time on task) is associated positively with student gain.

12. Non-substantive interaction between teacher and students relates negatively to student gain.

13. Unstructured student behavior is negatively related to student gain for a given learning task; a balance between teacher structuring and student freedom provides the optimal setting for student gain.

Reliability studies were completed for the competencies of the COKER instrument and other lists of competencies. In a study by Medley et al. (1984), the median reliability of all 22 keys of the University of Toledo competency indicators and the COKER was .466.
The instrument used for objective two was the COKER (Coker, 1982). This low-inference instrument was chosen because it records both teacher and student actions. Because it is a low-inference instrument, the evaluator only observes to see if an action has occurred without having the added responsibility of rating that response.

Low-inference instruments tend to have fewer factors than their high-inference counterparts. High-inference instruments, according to Wiersma and others (1983), usually evaluate what the teacher does before entering the classroom, such as writing lesson plans.

Collection of Data

The questionnaire was designed as a mail or personal delivery survey type instrument (Appendix A0. The data for the COKER instrument was collected by classroom observation. A brief letter of explanation was sent to the principals of the secondary schools, and another letter was sent to Dr. James Walter for the general secondary teachers in his classroom (see Appendix B). Other verbal instructions were accompanied by hand-delivered surveys to principals and/or department supervisors. A 100 percent response was obtained; thus, no follow-up letter was necessary.

To study the perceived importance of effective teaching competencies, respondents were asked to indicate the importance of 28 competencies. The responses utilized were: (1) not important, (2) little importance, (3) moderately important, (4) important, and (5) very important.
To study the differences between secondary vocational and general secondary teachers, information was gathered using the COKER instrument in the classroom setting.

**Analysis of Data**

Information from the surveys was coded and entered into the computer by Mike Adeline at the University of Nebraska-Lincoln campus for analysis.

Frequencies, ranges, means, and standard deviations were determined for the sample. Using the SPSS-X (Statistical Package for the Social Sciences), means were obtained which gave T-values and probabilities.

Means, F-values, and probabilities were obtained from the COKER instrument using the SAS program.
CHAPTER IV

FINDINGS

This study was concerned with identifying and ranking effective teaching competencies for vocational teachers, general secondary teachers, Nebraska Department of Education supervisors, and teacher educators. The differences demonstrated in the classroom between secondary vocational and general secondary teachers were also examined.

Objectives

The objectives of this study were to (1) identify and rank effective teaching competencies by vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors; and (2) determine if there was a difference in teaching effectiveness between secondary vocational and general secondary teachers as measured in the classroom, utilizing the COKER (Classroom Observations Keyed for Effectiveness Research).

Hypotheses

Null Hypothesis 1

There are no differences in the rank of effective teaching competencies by vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors.
To determine if there were any differences in the teaching effectiveness scores, comparisons were made at the .05 level of significance. Five of the 28 teaching effectiveness competencies were significantly different at the .05 level, as shown in Table 2.

The second-ranked competency, "gives clear directions and explanations," was significantly different (p < .05). The mean score for competency 8 was 4.86 for secondary teachers and 4.13 for teacher educators.

The third-ranked competency, "modifies instructional activities to accommodate identified learner needs," was significantly different (p < .05). The mean score for competency 4 was 4.86 for general secondary teachers and 4.38 for vocational teachers.

The ninth-ranked competency, "demonstrates proper listening skills," was significantly different (p < .05). The mean score for competency 10 was 5.00 for State Department of Education supervisors and 4.25 for teacher educators.

The eighteenth-ranked competency, "helps the student recognize progress and achievements," was significantly different (p < .05). The mean score for competency 18 was 4.83 for State Department of Education supervisors and 3.88 for teacher educators.

The twenty-fifth ranked competency, "explains grading/scoring standards to learners" was significantly different (p < .05). The mean score for competency 26 was 4.46 for vocational teachers and 3.76 for general secondary teachers.
Table 2
Mean Rank for Vocational Secondary Teachers, General Secondary Teachers, Nebraska Department of Education Supervisors, and Teacher Educators

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>Competency</th>
<th>Vocational Teachers Mean Rank (n=24)</th>
<th>General Teachers Mean Rank (n=29)</th>
<th>State Department Supervisors Mean Rank (n=6)</th>
<th>Teacher Educators Mean Rank (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 15</td>
<td>Demonstrates enthusiasm for teaching and the topics being taught. 4.73</td>
<td>1 4.75 3 4.76 9 4.67 2 4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 8</td>
<td>Gives clear directions and explanations. 4.64</td>
<td>4 4.58 1 4.86* 14 4.50 16 4.13*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 4</td>
<td>Modifies instructional activities to accommodate identified learner needs. 4.63</td>
<td>13 4.38* 1 4.86* 14 4.50 2 4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 7</td>
<td>Provides learning experiences which enable students to transfer principles and generalizations outside of school. 4.61</td>
<td>6 4.54 6 4.62 2 4.83 2 4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 16</td>
<td>Provides opportunities for successful experiences by students. 4.58</td>
<td>2 4.63 7 4.55 2 4.83 6 4.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 9</td>
<td>Encourages students to ask questions. 4.54</td>
<td>6 4.54 7 4.55 9 4.67 6 4.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 12</td>
<td>Maintains an environment in which students are involved, working on-task. 4.54</td>
<td>2 4.63 12 4.52 9 4.67 8 4.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 1</td>
<td>Uses a variety of instructional strategies 4.52</td>
<td>16 4.33 4 4.66 20 4.33 1 4.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 3</td>
<td>Develops and demonstrates problem-solving skills. 4.51</td>
<td>16 4.33 7 4.55 2 4.83 2 4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 10</td>
<td>Demonstrates proper listening skills. 4.51</td>
<td>6 4.54 14 4.44 1 5.00* 8 4.25*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>Competency</th>
<th>Vocational Teachers Mean Rank</th>
<th>General Teachers Mean Rank</th>
<th>State Department Supervisors Mean Rank</th>
<th>Teacher Educators Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Provides positive feedback to learners on their performances.</td>
<td>4.50</td>
<td>6 4.54</td>
<td>4 4.66</td>
<td>2 4.83</td>
</tr>
<tr>
<td>12</td>
<td>Demonstrates patience, empathy, and understanding.</td>
<td>4.48</td>
<td>11 4.50</td>
<td>7 4.55</td>
<td>20 4.33</td>
</tr>
<tr>
<td>12</td>
<td>Provides a clear description of the learning task and its contrasts.</td>
<td>4.48</td>
<td>6 4.54</td>
<td>13 4.48</td>
<td>14 4.50</td>
</tr>
<tr>
<td>14</td>
<td>Implements an effective classroom management system for positive student behavior (discipline)</td>
<td>4.40</td>
<td>4 4.58</td>
<td>16 4.31</td>
<td>9 4.67</td>
</tr>
<tr>
<td>15</td>
<td>Demonstrates ability to work with individuals, small groups, and large groups.</td>
<td>4.31</td>
<td>16 4.33</td>
<td>16 4.31</td>
<td>14 4.50</td>
</tr>
<tr>
<td>15</td>
<td>Uses a variety of resources and materials.</td>
<td>4.31</td>
<td>22 4.21</td>
<td>14 4.44</td>
<td>14 4.50</td>
</tr>
<tr>
<td>15</td>
<td>Provides learners appropriate practice and review.</td>
<td>4.31</td>
<td>20 4.25</td>
<td>19 4.27</td>
<td>2 4.83</td>
</tr>
<tr>
<td>18</td>
<td>Helps students recognize progress and achievements.</td>
<td>4.30</td>
<td>13 4.38</td>
<td>20 4.24</td>
<td>2 4.83*</td>
</tr>
<tr>
<td>19</td>
<td>Provides examples of task to be completed.</td>
<td>4.25</td>
<td>20 4.25</td>
<td>18 4.28</td>
<td>20 4.33</td>
</tr>
<tr>
<td>19</td>
<td>Monitors learning understanding and re-teaches as necessary.</td>
<td>4.25</td>
<td>16 4.33</td>
<td>7 4.55</td>
<td>2 4.83</td>
</tr>
<tr>
<td>21</td>
<td>Relates goals to students' interests and needs.</td>
<td>4.24</td>
<td>22 4.21</td>
<td>22 4.21</td>
<td>14 4.50</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>Competency</th>
<th>Vocational Teachers Mean (n=24)</th>
<th>General Teachers Mean (n=29)</th>
<th>State Department Supervisors Mean (n=6)</th>
<th>Teacher Educator Mean (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 14</td>
<td>Assists students in discovering and correcting errors and inaccuracies.</td>
<td>4.21</td>
<td>13 4.38</td>
<td>20 4.33</td>
<td>10 4.13</td>
</tr>
<tr>
<td>23 19</td>
<td>Uses a variety of cognitive levels in strategies of questioning.</td>
<td>4.16</td>
<td>26 3.92</td>
<td>9 4.67</td>
<td>8 4.25</td>
</tr>
<tr>
<td>24 21</td>
<td>Allows for individual differences in evaluating pupils.</td>
<td>4.12</td>
<td>24 4.04</td>
<td>23 4.17</td>
<td>26 4.17</td>
</tr>
<tr>
<td>25 26</td>
<td>Explains grading/scoring standards to learners.</td>
<td>4.09</td>
<td>12 4.46*</td>
<td>27 3.76*</td>
<td>20 4.33</td>
</tr>
<tr>
<td>26 28</td>
<td>Seeks and utilizes community resources to enhance vocational instruction.</td>
<td>3.93</td>
<td>24 4.04</td>
<td>26 3.79</td>
<td>20 4.33</td>
</tr>
<tr>
<td>27 2</td>
<td>Uses convergent and divergent inquiry strategies.</td>
<td>3.89</td>
<td>28 3.58</td>
<td>24 4.11</td>
<td>26 4.17</td>
</tr>
<tr>
<td>28 27</td>
<td>Arranges furniture and equipment to facilitate movement in the classroom/laboratory.</td>
<td>3.73</td>
<td>27 3.88</td>
<td>28 3.62</td>
<td>28 3.83</td>
</tr>
</tbody>
</table>

* = significant differences between groups (p < .05)

Note. 5.0 = high, 1.0 = low
The first null hypothesis, which stated there were no differences in the rank of effective teaching competencies by vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors, was rejected because of the differences in five of the competencies.

All other teaching-effectiveness competencies were within the acceptable range used for this study. Individual rankings may be seen in Appendices C through F.

Null Hypothesis 2

There are no differences in teaching effectiveness scores demonstrated in the classroom between secondary vocational teachers and general classroom teachers.

To study this hypothesis, the COKER (Classroom Observations Keyed for Effectiveness Research) instrument was utilized. Observation of the nine secondary teachers from the Newman Grove and Tilden-Elkhorn Valley schools by the author were compared with data from a prior study of 25 vocational teachers by Leverne Barrett. The SAS procedure was utilized to calculate mean scores.

Significant differences at the p < .10 level were found between two teaching effectiveness competencies (see Table 3). Competency 14, in which the teacher "maintains an environment in which students are actively involved," showed the vocational teachers with an average mean of 51.75. General secondary teachers scored an average mean of 45.13.

Competency 19, in which the teacher "implements an effective classroom management system for positive behaviors," showed the
Table 3

A Comparison of Mean Teacher Competency Effectiveness Scores Between Vocational and General Secondary Teachers

<table>
<thead>
<tr>
<th>Competency</th>
<th>Secondary Teacher Mean (n=9)</th>
<th>Vocational Teacher Mean (n=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Demonstrates enthusiasm for teaching and the topics being taught.</td>
<td>50.62</td>
<td>49.78</td>
</tr>
<tr>
<td>2 Uses a variety of instructional strategies.</td>
<td>52.21</td>
<td>49.20</td>
</tr>
<tr>
<td>3 Demonstrates patience, empathy, and understanding.</td>
<td>46.91</td>
<td>51.11</td>
</tr>
<tr>
<td>4 Monitors student understanding and reteaches.</td>
<td>50.63</td>
<td>49.77</td>
</tr>
<tr>
<td>5 Provides students practice and review.</td>
<td>46.56</td>
<td>51.24</td>
</tr>
<tr>
<td>6 Creates positive environment.</td>
<td>51.35</td>
<td>49.52</td>
</tr>
<tr>
<td>7 Assists students in discovering correcting errors and inaccuracies.</td>
<td>54.05</td>
<td>48.56</td>
</tr>
<tr>
<td>8 Teacher stimulates student interest.</td>
<td>47.51</td>
<td>50.90</td>
</tr>
<tr>
<td>9 Uses a variety of sensory materials.</td>
<td>53.70</td>
<td>48.67</td>
</tr>
<tr>
<td>10 Uses a variety of cognitive levels in strategies of questioning.</td>
<td>47.99</td>
<td>50.21</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>Competency</th>
<th>Secondary Teacher Mean (n=9)</th>
<th>Vocational Teacher Mean (n=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11  Provides opportunities for successful experiences by students.</td>
<td>50.36</td>
<td>49.85</td>
</tr>
<tr>
<td>12  Uses convergent and divergent inquiry strategies.</td>
<td>48.30</td>
<td>50.62</td>
</tr>
<tr>
<td>13  Demonstrates proper listening skills.</td>
<td>46.04</td>
<td>51.43</td>
</tr>
<tr>
<td>14  Maintains an environment in which students are actively involved.</td>
<td>45.13&lt;sup&gt;a&lt;/sup&gt;</td>
<td>51.75&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>15  Encourages students to ask questions.</td>
<td>51.06</td>
<td>49.50</td>
</tr>
<tr>
<td>16  Provides positive feedback to on their performance.</td>
<td>47.83</td>
<td>50.78</td>
</tr>
<tr>
<td>17  Develops and demonstrates problem-solving skills.</td>
<td>54.05</td>
<td>48.54</td>
</tr>
<tr>
<td>18  Gives clear directions and explanations.</td>
<td>51.75</td>
<td>49.37</td>
</tr>
<tr>
<td>19  Implements an effective classroom management system for positive behaviors.</td>
<td>44.04&lt;sup&gt;a&lt;/sup&gt;</td>
<td>52.14&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

*Note:* Letter "a" is significantly higher than letter "b"; p < .10.
vocational teachers scored an average mean of 52.14, and general secondary teachers scored an average mean of 44.04. Therefore, null hypothesis 2, which stated there were no differences in teaching effectiveness scores demonstrated in the classroom between secondary vocational teachers and general classroom teachers, was rejected.

Both null hypotheses were rejected because significant differences were found between scores of the various groups studied.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Statement of the Problem

The problem which was attempted to be solved in this study was that educators at all levels have not identified effective teaching competencies for vocational educators, nor have researchers used these competencies to compare vocational teachers with non-vocational teachers.

Procedures

The questionnaire used in this study was developed from several sources. The list of competencies was further refined with the aid of University of Nebraska-Lincoln staff members, which included David Agnew, Lloyd Bell, and Leverne Barrett. This questionnaire was used to test the first null hypothesis.

The sample of teachers selected included vocational teachers from seven secondary schools within 150 miles of Lincoln, Nebraska; State Department of Education supervisors; teacher educators; and selected general secondary teachers attending the first 1987 summer session at the University of Nebraska-Lincoln campus.

The second hypothesis was tested using classroom observation in two secondary schools. Non-vocational teachers were compared to previous
studies of vocational teachers. Both groups were observed utilizing the COKER instrument.

Conclusions

This study sought to determine the importance of effective teaching competencies of secondary vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors. The study also sought to determine if general secondary and secondary vocational teachers' classroom instruction is indeed different.

Conclusion 1

There were differences in the scores given to effective teaching competencies by secondary vocational teachers, general secondary teachers, State Department of Education supervisors, and teacher educators. It is interesting to note that all scores were relatively high, with the lowest mean score being 3.58. Therefore, it can be stated that respondents in the four groups believed all 28 competencies were important.

Five of the 28 competencies showed significant differences at the .05 level. These competencies, in order of final total rank, were:

2. Gives clear directions and explanations.
3. Modifies instructional activities to accommodate identified learner needs.
10. Demonstrates proper listening skills.
18. Helps students recognize progress and achievements.
25. Explains grading/scoring standards to learners.
The difference in the second-ranked competency, in which the teacher "gives clear directions and explanations," involved general secondary teachers who scored a mean of 4.86 and the teacher educator group who scored a mean of 4.13. The author concluded the difference was because secondary teachers worked with younger, less sophisticated students who required more guidelines.

The third-ranked competency, in which the teacher "modifies instructional activities to accommodate identified learner needs," was placed first by general secondary teachers with a mean score of 4.86, while secondary vocational teachers ranked this in thirteenth place with a mean score of 4.38. There are several conclusions that can be drawn from this finding: (1) general secondary teachers were more aware of the need to vary teaching strategies due to the nature of their subjects; and (2) vocational teachers may take for granted that the subject is in itself interesting and find less need to vary strategies.

The competency, in which the teacher "demonstrates proper listening skills," was ranked first by State Department of Education supervisors with a mean score of 5.00. Teacher educators ranked this competency eighth, with a mean score of 4.25. The possible explanation of this difference was not evident from the data.

The competency, in which the teacher "helps students recognize progress and achievements," was ranked second by State Department of Education supervisors, with a mean score of 4.83. Teacher educators ranked this competency twenty-fifth, with a mean score of 3.88.
The possible explanation of this difference was not evident from the data.

The competency, in which the teacher "explains grading and scoring standards to learners," was ranked twelfth by the vocational teachers, with a mean score of 4.46 and ranked twenty-seventh by the general secondary teachers, with a mean score of 3.76.

It can be concluded that vocational teachers usually evaluated not only the written test, but evaluated the students' "hands-on" performance. It should be noted there is a safety factor in operating equipment and procedure type of instructions that have specific standards in vocational education.

It can be concluded that not all groups placed the same importance on various teaching effectiveness competencies. This difference could affect what student teachers are taught to be important, where emphasis in classrooms should be placed, where money on equipment and teacher inservices should be spent, and the basis for evaluation. This could affect retention, promotions, and how teachers and their immediate supervisors relate.

**Conclusion 2**

There were differences in teaching effectiveness demonstrated in the classroom between secondary vocational teachers and general secondary teachers. The following two competencies were found to be significantly different at the $p < .10$ level.

The mean score of vocational teachers for competency 14, in which the teacher "maintains an environment in which students are actively
involved," was 51.75; the mean score of general secondary teachers was 45.13.

It is the author's conclusion that the vocational teachers scored higher on competency 14 because vocational classes are "hands-on" and vocational teachers put greater emphasis on laboratory instruction. It can be concluded that it was easier to observe if a student was working in a "hands-on" setting as opposed to a thought-process type of learning activity.

The mean score of vocational teachers for competency 19, in which the teacher "implements an effective classroom management system for positive behaviors, was 52.14; the mean score of general secondary teachers was 44.04.

It is concluded that it was easier for the vocational teacher to observe positive behavior and thus compliment students. Students will cause fewer disruptive problems if they are actively involved because of laboratory settings. With safety considerations, vocational teachers place a greater emphasis on positive, active participation during classroom activities.

**Recommendations**

Based upon the findings of this research and the judgments of this author, the following recommendations are made concerning teaching effectiveness competencies as perceived by secondary vocational teachers, general secondary teachers, teacher educators, and State Department of Education supervisors.
1. A summary of this study should be made available to all groups involved in this study to dispel misconceptions as to what is deemed important in teaching effectiveness.

2. Further research needs to be conducted in identifying effective teaching competencies.

3. Further research needs to be conducted in studying effective teaching competencies that are demonstrated in the classroom in specific areas of instruction.

4. Further research needs to be conducted to produce effective teacher evaluation processes that administrators can use to evaluate instruction in specific areas.
REFERENCES


Doyle, D. P. (1984). Effective classroom practices in secondary schools. Austin, TX: Texas University, Research and Development Center for Teacher Education.


Martin, D. W. (1987, February). Teacher testing: But when the test is over, will you still respect me? Paper presented at the Annual Meeting of the Association of Teacher Educators, Houston, TX.


APPENDIX A

Questionnaire
EFFECTIVE TEACHING COMPETENCIES

School________________________________________

Name ___________________________ Years of Experience ____________

Education: ___ B.S. ___ B.S. + 10 grad. hours ___ B.S. + 20
___ B.S. + 30 ___ M.S. ___ M.S. + 10 ___ M.S. + 20

DIRECTIONS: After reading each of the statements below, indicate how important each is to effective teaching by circling the appropriate response:

5 = Very Important
4 = Important
3 = Moderately Important
2 = Of Little Importance
1 = Not Important

1. Uses a variety of instructional strategies. 1 2 3 4 5
2. Uses convergent and divergent inquiry strategies. 1 2 3 4 5
3. Develops and demonstrates problem-solving skills. 1 2 3 4 5
4. Modifies instructional activities to accommodate identified learner needs. 1 2 3 4 5
5. Demonstrates ability to work with individuals, small groups, and large groups. 1 2 3 4 5
6. Uses a variety of resources and materials. 1 2 3 4 5
7. Provides learning experiences which enable students to transfer principles and generalizations outside of school. 1 2 3 4 5
8. Gives clear directions and explanations. 1 2 3 4 5
9. Encourages students to ask questions. 1 2 3 4 5
10. Demonstrates proper listening skills. 1 2 3 4 5

11. Provides positive feedback to learners on their performance. 1 2 3 4 5

12. Maintains an environment in which students are actively involved, working on-task. 1 2 3 4 5

13. Implements an effective classroom management system for positive student behavior (discipline). 1 2 3 4 5

14. Assists students in discovering and correcting errors and inaccuracies. 1 2 3 4 5

15. Demonstrates enthusiasm for teaching and the topics being taught. 1 2 3 4 5

16. Provides opportunities for successful experiences by students. 1 2 3 4 5

17. Demonstrates patience, empathy, and understanding. 1 2 3 4 5

18. Helps students recognize progress and achievements. 1 2 3 4 5

19. Uses a variety of cognitive levels in strategies of questioning. 1 2 3 4 5

20. Relates goals to student interests and needs. 1 2 3 4 5

21. Allows for individual differences in evaluating pupils. 1 2 3 4 5

22. Provides a clear description of the learning task and its content. 1 2 3 4 5

23. Provides examples of how task is to be completed. 1 2 3 4 5

24. Monitors learner understanding and reteaches as necessary. 1 2 3 4 5
25. Provides learners appropriate practice and review. 1 2 3 4 5

26. Explains grading/scoring standards to learners. 1 2 3 4 5

27. Arranges furniture and equipment to facilitate movement in the classroom/laboratory. 1 2 3 4 5

28. Seeks and utilizes community resources to enhance vocational instruction. 1 2 3 4 5

Please list any additional competencies that you believe to be essential for vocational education.

1.
2.
3.
4.
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7.
8.
9.
10.
APPENDIX B

Correspondence
University of Nebraska
Institute of Agriculture and Natural Resources

June 10, 1087

Dr. James L. Walter
118 Henzlik Hall
Center for Curriculum & Instruction
University of Nebraska-Lincoln
Lincoln, NE 58583-0355

Dear Dr. Walter:

I would be appreciative if you would distribute this survey to teachers enrolled in summer school classes in your department. The teachers should be teaching at the secondary level in non-vocational areas.

The objectives of my thesis are as follows:

1. To determine the ranking of effective teaching competencies by vocational teachers, general secondary teachers, teacher educators and State Department of Education supervisors.

2. To determine if there is a difference by teaching effectiveness competencies between secondary vocational and general secondary teachers.

3. To determine if there is a relationship between years of teaching experience, degree held, and ranking of teaching competencies.

4. To determine if vocational teachers can identify unique effective teaching competencies for vocational teachers (note: this is not needed by general secondary teachers for this survey).
I greatly appreciate your assistance in the completion of this survey. When all surveys are completed, please return them to me at the above address.

Sincerely,

Lee Sayer  
Graduate Assistant

Leverne A. Barrett  
Associate Professor

LES/LAB/ak
APPENDIX C

Rank and Average Mean Competency Scores for Vocational Teachers
<table>
<thead>
<tr>
<th>Rank</th>
<th>No.</th>
<th>Competency</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>Demonstrates enthusiasm for teaching and the topics being taught.</td>
<td>4.75</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
<td>4.63</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>Maintains an environment in which students are actively involved, working on-task.</td>
<td>4.63</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>Gives clear directions and explanations.</td>
<td>4.58</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>Implements an effective classroom management system for positive student behavior (discipline).</td>
<td>4.58</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Provides learning experiences which enable students to transfer principles and generalizations outside of school.</td>
<td>4.54</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>Encourages students to ask questions.</td>
<td>4.54</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>Demonstrates proper listening skills.</td>
<td>4.54</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
<td>Provides positive feedback to learners on their performance.</td>
<td>4.54</td>
</tr>
<tr>
<td>6</td>
<td>22</td>
<td>Provides a clear description of the learning task and its contrast.</td>
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<tr>
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<td>Demonstrates patience, empathy, and understanding.</td>
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</tr>
<tr>
<td>13</td>
<td>18</td>
<td>Helps students recognize progress and achievements.</td>
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</tr>
<tr>
<td>13</td>
<td>14</td>
<td>Assists students in discovering and correcting errors and inaccuracies.</td>
<td>4.38</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>Modifies instructional activities to accommodate identified learner needs.</td>
<td>4.38</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>Uses a variety of instructional strategies.</td>
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</tr>
<tr>
<td>16</td>
<td>3</td>
<td>Develops and demonstrates problem-solving skills.</td>
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<tr>
<td>16</td>
<td>5</td>
<td>Demonstrates ability to work with individuals, small groups, and large groups.</td>
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</tr>
<tr>
<td>16</td>
<td>24</td>
<td>Monitors learning understanding and reteaches as necessary.</td>
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</tr>
<tr>
<td>20</td>
<td>23</td>
<td>Provides examples of task to be completed.</td>
<td>4.25</td>
</tr>
<tr>
<td>20</td>
<td>25</td>
<td>Provides learners appropriate practice and review.</td>
<td>4.25</td>
</tr>
<tr>
<td>22</td>
<td>6</td>
<td>Uses a variety of resources and materials.</td>
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<td>22</td>
<td>20</td>
<td>Relates goals to students' interests and needs.</td>
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<td>Allows for individual differences in evaluating pupils.</td>
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<td>28</td>
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<td>26</td>
<td>19</td>
<td>Uses a variety of cognitive levels in strategies of questioning.</td>
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APPENDIX D

Rank and Average Mean Competency Scores for General Secondary Teachers
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<td>Modifies instructional activities to accommodate identified learner needs.</td>
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<tr>
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<td>Uses a variety of instructional strategies.</td>
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</tr>
<tr>
<td>4</td>
<td>11</td>
<td>Provides positive feedback to learners on their performance.</td>
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</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Provides learning experiences which enable students to transfer principles and generalizations outside of school.</td>
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</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Develops and demonstrates problem-solving skills.</td>
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</tr>
<tr>
<td>7</td>
<td>9</td>
<td>Encourages students to ask questions.</td>
<td>4.55</td>
</tr>
<tr>
<td>7</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
<td>4.55</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>Demonstrates patience, empathy, and understanding.</td>
<td>4.55</td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>Monitors learning understanding and reteaches as necessary.</td>
<td>4.55</td>
</tr>
<tr>
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<td>12</td>
<td>Maintains an environment in which students are actively involved, working on-task.</td>
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<td>Competency</td>
<td>Mean</td>
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<td>Uses a variety of resources and materials.</td>
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<tr>
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</tr>
<tr>
<td>18</td>
<td>23</td>
<td>Provides examples of task to be completed.</td>
<td>4.28</td>
</tr>
<tr>
<td>19</td>
<td>25</td>
<td>Provides learners appropriate practice and review.</td>
<td>4.27</td>
</tr>
<tr>
<td>20</td>
<td>18</td>
<td>Helps students recognize progress and achievements.</td>
<td>4.24</td>
</tr>
<tr>
<td>20</td>
<td>19</td>
<td>Uses a variety of cognitive levels in strategies of questioning.</td>
<td>4.24</td>
</tr>
<tr>
<td>22</td>
<td>20</td>
<td>Relates goals to students' interests and needs.</td>
<td>4.21</td>
</tr>
<tr>
<td>23</td>
<td>21</td>
<td>Allows for individual differences in evaluating pupils.</td>
<td>4.17</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>Uses convergent and divergent inquiry strategies.</td>
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</tr>
<tr>
<td>25</td>
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<td>Assists students in discovering and correcting errors and inaccuracies.</td>
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<tr>
<td>26</td>
<td>28</td>
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<tr>
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<td>------</td>
</tr>
<tr>
<td>27</td>
<td>26</td>
<td>Explains grading/scoring standards to learners.</td>
<td>3.76</td>
</tr>
<tr>
<td>28</td>
<td>27</td>
<td>Arranges furniture and equipment to facilitate movement in the classroom/laboratory.</td>
<td>3.62</td>
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</table>
APPENDIX E

Rank and Mean Competency Scores for Teacher Educators
<table>
<thead>
<tr>
<th>Rank</th>
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<th>Competency</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Uses a variety of instructional strategies.</td>
<td>4.75</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Develops and demonstrates problem-solving skills.</td>
<td>4.63</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Modifies instructional activities to accommodate identified learner needs.</td>
<td>4.63</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>Provides learning experiences which enable students to transfer principles and generalizations outside of school.</td>
<td>4.63</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>Demonstrates enthusiasm for teaching and the topics being taught.</td>
<td>4.63</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>Encourages students to ask questions.</td>
<td>4.38</td>
</tr>
<tr>
<td>6</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
<td>4.38</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>Demonstrates proper listening skills.</td>
<td>4.25</td>
</tr>
<tr>
<td>8</td>
<td>11</td>
<td>Provides positive feedback to learners on their performance.</td>
<td>4.25</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>Maintains an environment in which students are actively involved, working on-task.</td>
<td>4.25</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
<td>4.25</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
<td>Uses a variety of cognitive levels in strategies of questioning.</td>
<td>4.25</td>
</tr>
<tr>
<td>Rank</td>
<td>No.</td>
<td>Competency</td>
<td>Mean</td>
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<td>------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>8</td>
<td>20</td>
<td>Relates goals to students' interests and needs.</td>
<td>4.25</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
<td>Provides a clear description of the learning task and its contrast.</td>
<td>4.25</td>
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<tr>
<td>8</td>
<td>25</td>
<td>Provides learners appropriate practice and review.</td>
<td>4.25</td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>Demonstrates ability to work with individuals, small groups, and large groups.</td>
<td>4.13</td>
</tr>
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<td>16</td>
<td>8</td>
<td>Gives clear directions and explanations.</td>
<td>4.13</td>
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<tr>
<td>16</td>
<td>14</td>
<td>Assists students in discovering and correcting errors and inaccuracies.</td>
<td>4.13</td>
</tr>
<tr>
<td>16</td>
<td>21</td>
<td>Allows for individual differences in evaluating pupils.</td>
<td>4.13</td>
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<tr>
<td>16</td>
<td>23</td>
<td>Relates goals to students' interests and needs.</td>
<td>4.13</td>
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<tr>
<td>16</td>
<td>24</td>
<td>Monitors learning understanding and reteaches if necessary.</td>
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</tr>
<tr>
<td>22</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
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</tr>
<tr>
<td>22</td>
<td>13</td>
<td>Implements an effective classroom management system for positive student behavior (discipline).</td>
<td>4.00</td>
</tr>
<tr>
<td>22</td>
<td>26</td>
<td>Explains grading/scoring standards to learners.</td>
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<td>Helps students recognize progress and achievements.</td>
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<td>Mean</td>
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<td>----------------------------------------------------------------------------</td>
<td>------</td>
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<tr>
<td>27</td>
<td>28</td>
<td>Seeks and utilizes community resources to enhance vocational instruction.</td>
<td>3.75</td>
</tr>
<tr>
<td>28</td>
<td>27</td>
<td>Arranges furniture and equipment to facilitate movement in the classroom/laboratory.</td>
<td>3.63</td>
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</tbody>
</table>
APPENDIX F

Rank and Average Mean Competency Scores for
State Department of Education Supervisors
Rank and Average Mean Competency Scores for State Department of Education Supervisors

<table>
<thead>
<tr>
<th>Rank</th>
<th>No.</th>
<th>Competency</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>Demonstrates proper listening skills.</td>
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</tr>
<tr>
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<td>3</td>
<td>Develops and demonstrates problem-solving skills.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>Provides learning experiences which enable students to transfer principles and generalizations outside of school.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>Provides positive feedback to learners on their performance.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>Provides opportunities for successful experiences by students.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>Helps students recognize progress and achievements.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>Monitors learning understanding and reteaches as necessary.</td>
<td>4.83</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>Provides learners appropriate practice and review.</td>
<td>4.83</td>
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<tr>
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<td>9</td>
<td>Encourages students to ask questions.</td>
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</tr>
<tr>
<td>9</td>
<td>12</td>
<td>Maintains an environment in which students are actively involved, working on-task.</td>
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</tr>
<tr>
<td>9</td>
<td>13</td>
<td>Implements an effective classroom management system for positive student behavior (discipline).</td>
<td>4.67</td>
</tr>
<tr>
<td>9</td>
<td>15</td>
<td>Demonstrates enthusiasm for teaching and the topics being taught.</td>
<td>4.67</td>
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<tr>
<td>Rank</td>
<td>No.</td>
<td>Competency</td>
<td>Mean</td>
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</tr>
<tr>
<td>9</td>
<td>19</td>
<td>Uses a variety of cognitive levels in strategies of questioning.</td>
<td>4.67</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>Modifies instructional activities to accommodate identified learner needs.</td>
<td>4.50</td>
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<tr>
<td>14</td>
<td>5</td>
<td>Demonstrates ability to work with individuals, small groups, and large groups.</td>
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<tr>
<td>14</td>
<td>6</td>
<td>Uses a variety of resources and materials.</td>
<td>4.50</td>
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<tr>
<td>14</td>
<td>8</td>
<td>Gives clear directions and explanations.</td>
<td>4.50</td>
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<tr>
<td>14</td>
<td>20</td>
<td>Relates goals to students' interests and needs.</td>
<td>4.50</td>
</tr>
<tr>
<td>14</td>
<td>22</td>
<td>Provides a clear description of the learning task and its contrast.</td>
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<tr>
<td>20</td>
<td>1</td>
<td>Uses a variety of instructional strategies.</td>
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<tr>
<td>20</td>
<td>14</td>
<td>Assists students in discovering and correcting errors and inaccuracies.</td>
<td>4.33</td>
</tr>
<tr>
<td>20</td>
<td>17</td>
<td>Demonstrates patience, empathy, and understanding.</td>
<td>4.33</td>
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<tr>
<td>20</td>
<td>23</td>
<td>Provides examples of task to be completed.</td>
<td>4.33</td>
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<td>20</td>
<td>26</td>
<td>Explains grading/scoring standards to learners.</td>
<td>4.33</td>
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<td>20</td>
<td>28</td>
<td>Seeks and utilizes community resources to enhance vocational instruction.</td>
<td>4.33</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>Uses convergent and divergent inquiry strategies.</td>
<td>4.17</td>
</tr>
<tr>
<td>Rank</td>
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</tr>
<tr>
<td>26</td>
<td>21</td>
<td>Allows for individual differences in evaluating pupils.</td>
<td>4.17</td>
</tr>
<tr>
<td>28</td>
<td>27</td>
<td>Arranges furniture and equipment to facilitate movement in the classroom/laboratory.</td>
<td></td>
</tr>
</tbody>
</table>