August 1980

An Analysis of the Attitudes of Selected Public School Educators in Tennessee Toward Minimum Competency Testing

Judy A. Walters

East Tennessee State University

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AN ANALYSIS OF THE ATTITUDES OF SELECTED PUBLIC SCHOOL EDUCATORS
IN TENNESSEE TOWARD MINIMUM COMPETENCY TESTING

A Dissertation
Presented to
the Faculty of the Department of Supervision and Administration
East Tennessee State University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Judy Ann Daniels Walters
August, 1980
APPROVAL

This is to certify that the Advanced Graduate Committee of

JUDY ANN WALTERS

met on the

11th day of July, 1980.

The committee read and examined her dissertation, supervised her
defense of it in an oral examination, and decided to recommend that
her study be submitted to the Graduate Council and the Dean of the
School of Graduate Studies in partial fulfillment of the requirements
for the degree Doctor of Education.

Floyd H. Edwards
Chairman, Advanced Graduate Committee

Signed on behalf of
the Graduate Council

Elizabeth L. Tatum
Dean, School of Graduate Studies
ABSTRACT

AN ANALYSIS OF THE ATTITUDES OF SELECTED PUBLIC SCHOOL EDUCATORS IN TENNESSEE TOWARD MINIMUM COMPETENCY TESTING

by

Judy Ann Walters

The problem was to determine whether significant relationships exist in the attitudes of eighth-grade teachers, their principals, and their superintendents toward minimum competency testing in Tennessee.

Literature was reviewed in order to determine the problems associated with the implementation of a minimum competency testing program. Questionnaires were developed to obtain the attitudes of teachers, principals, and superintendents about the questions most often encountered in the literature.

School systems to be surveyed were selected by stratified random sampling from defined pupil enrollment categories after the questionnaires were field tested. Superintendents from 36 public school systems were identified to receive questionnaires and they each selected three eighth-grade teachers and three principals to complete questionnaires as well. Respondents were to have direct knowledge of the administration of the 1979 eighth-grade diagnostic basic skills test (a minimum competency test).

Questionnaires were designed to obtain demographic data about the systems or schools represented by the respondents, personal data about the respondents, and attitudinal data on 17 items with responses to be ranked in order of priority by the respondents. A total of 100 questionnaires were received by the cut-off date, and these represented a 40% return.

Personal data and demographic data were reported in tables. Nonparametric statistics were utilized to analyze the degree of relationship among the ordinal level data obtained from Items A-Q on the questionnaires. Agreement was tested intra-groups by Kendall's coefficient of concordance, and agreement between groups was tested by the Spearman rank-order correlation. The .05 level of significance was applied in all cases using the two-tailed test.

Results of the data analyses indicated that agreement was more often significant within groups than between groups. Within groups (eighth-grade teachers, principals, and superintendents), a significant
relationship was obtained for all 17 attitudinal items on the questionnaires for teachers and for principals, and for all items except H for superintendents.

In the between-group analyses for first, second, and third priority responses, teachers and principals displayed greater agreement of rankings on each item than did teachers and superintendents, or than principals and superintendents displayed. Teachers and principals agreed significantly on 88% of the items for first priority responses, 71% of the items for second priority responses, and 47% of the items for third priority responses. Teachers and superintendents agreed significantly on 65%, 47%, and 29% of the items for first, second, and third priorities. Principals and superintendents indicated significant agreement on 59%, 41%, and 35% of the items for first, second, and third priorities.

Very few differences were noted between groups in the responses most often reported for first, second, and third priorities. Frequently, the same three responses were chosen as first, second, or third priority for each item by the three groups, but in a slightly different order by the different groups. Analysis of rankings beyond third priority was not conducted due to the great number of tied rankings after the third priority.

Analysis of the demographic data revealed that most respondents represented students other than urban, upper-class youngsters and schools without a large percentage of minority students. Answers to general questions about the administration procedures for the 1979 basic skills test indicated that most systems administered the test in a comparable manner.

Most respondents were between the ages of 20 and 49, and 71% of them had attained a Master's degree or above. Teaching certification was held by 81% of the respondents, and administrative certification by 57%. Teaching experience of 1-15 years was reported by 76% of the respondents and administrative experience of 1-15 years by 47%. Supervisory certification and experience were negligible.
Institutional Review Board

This is to certify that the following study has been filed and approved by the Institutional Review Board of East Tennessee State University.

Title of Grant or Project  AN ANALYSIS OF THE ATTITUDES OF SELECTED PUBLIC SCHOOL EDUCATORS IN TENNESSEE TOWARD MINIMUM COMPETENCY TESTING

Principal Investigator  Judy Ann Walters

Department  Supervision and Administration

Date Submitted  September 6, 1979

Institutional Review Board Approval, Chairman  [Signature]
DEDICATION

This study is dedicated to Flossie Jones Shelton, a dear friend who gave me the inspiration I needed to complete the work I had started.
ACKNOWLEDGMENTS

I would like to thank my committee chairman, Dr. Floyd H. Edwards, for his unflagging support of my efforts to complete this study. There was never a time when he was too busy to discuss the study or to listen to my problems with it. I will always remember his help in my achievement of an educational goal.

Special thanks go to Dr. Robert Shepard and Dr. Albert Hauff for their contributions to my knowledge and enthusiasm for research and statistics. Dr. Shepard directed the statistical procedures for this study, and his help was greatly appreciated.

Dr. Charles Burkett, Dr. A. Keith Turkett, and Dr. Norman Hankins contributed to the enrichment of my academic career as well. They are true professionals whose academic demeanor I admire.

Other persons deserving heartfelt appreciation are Amelia Schumaier and Al Dosser of the Office of Computer Services at East Tennessee State University who developed a new computer program to analyze the data for the study and cheerfully helped me in every way.

I would also like to thank my parents, my brother and Pam, and my grandmother Kate for giving me love and security, and all my relatives and friends who encouraged me and displayed faith in my abilities. To Frances, Imy, Mr. Howe, Earnie, and Lorraine I offer sincere thanks.
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Chapter 1

INTRODUCTION

A major educational concern of the 1970's was a belief by the public that students were not acquiring the basic skills necessary to be successful in society. Declining scores on the Scholastic Aptitude Test (SAT), the National Assessment of Education Progress (NAEP), and the American College Testing Program (ACT), as well as other indicators of marginal student performance, caused many adults to regard the public school system with a certain skepticism (Sheils, 1977b).

The decade of the seventies was marked by the continual quest by the public to find out what American students were learning (Koenke, 1979). Baseline data were collected in the elementary and secondary schools of the nation in 1970 by the NAEP. The agency measured student achievement in art, careers, citizenship, literature, mathematics, music, reading, science, social studies, and writing. Yearly reassessments of pupil progress became an accepted instrument of education.

Declines in pupil achievement in science, mathematics, and language arts were reported in 1975. That same year, the College Entrance Examination Board reported a ten-point drop in student achievement on the verbal section of the SAT and an eight-point drop in achievement on the mathematics section from 1974. The public was informed that a decline in achievement had begun in the 1960's and that the trend would probably continue (Sheils, 1977b).

The Navy reported that 70% of 12,000 recruits who dropped out of basic training in 1976 could not read the basic training manual, even
though most of them had high school diplomas. Were United States high schools producing illiterates (Sheils, 1977a)?

San Francisco was the scene of the first malpractice suit against a school system in the nation. In 1973, Peter W. alleged that he was unable to read at fifth-grade level upon high school graduation, which was below the competence necessary for holding a job (Lewis, 1979a; Saretsky, 1973). Although the case, Peter W. v. San Francisco Unified School District, 1976, was not decided in the plaintiff's favor because he failed to establish a duty of care owed to him by the state, the case typified the pervading atmosphere of distrust of public education (Saretsky, 1973).

A study commissioned by the College Entrance Examination Board in the mid-1970's was undertaken to discover possible causes for the decrease in student achievement. The panel surmised that less critical reading, less homework, less supervision of students' leisure activities, and less motivation to excel were prevalent. They added that textbooks had been rewritten in simpler language, and that promotion from grade to grade was almost automatic (Sheils, 1977b). Educators organized to study and report on the situation cited factors such as the negative effect of television and the increased number of minority students taking the tests as possible reasons for the decline.

Angered by rising school taxes and inflamed by news stories criticizing the quality of public education, many taxpayers and their legislators demanded a swift, stern return to the "basics" with assurances that their tax dollars were not being wasted (Spofford, 1978). The public seemed to want more drill, more recitation, more homework, stricter discipline, the teaching of patriotism, and no more
social promotions (Brodinsky, 1977, 1979). According to the latest Gallup poll on education in the United States, 83% of the persons surveyed favored increased emphasis on the "basics"—reading, writing, and arithmetic.

The minimum competency testing movement resulted from the pressure of educational reformers who wanted to be certain that students graduating from the nation's high schools could function adequately in society after graduation. Their proposal was that minimum standards of skills and knowledge be identified as the basis for graduation from high school. Involved in this process were the selection and definition of competencies they considered necessary for success, establishment of minimum levels of proficiency, and the development of tests to determine whether or not the standards were being met (American Friends Service Committee, 1977; Education Commission of the States, 1978).

Because public demand was great for such programs, no state neglected them. Minimum competency laws and state board of education mandates were passed rapidly throughout the late seventies. The hasty growth of the movement indicated a growing desire by the public for more accountability in education (Clark & Thomson, 1976).

The Problem

The problem of the study was to determine and analyze the attitudes of selected eighth-grade teachers, their principals, and their superintendents in the public schools of Tennessee toward minimum competency testing.
Sub-Problems

The following sub-problems were included as part of the study. These sub-problems were to survey and report:

1. The number of eighth-grade graduates represented by the respondents to the questionnaires;

2. The percentage of minority students in each system surveyed, the predominant economic level of the community, and the predominant geographical distribution;

3. The number of eighth-grade graduates affected by failure on the eighth-grade diagnostic basic skills test of 1979 (a minimum competency test) and plans for remediation;

4. The administration procedure for the 1979 eighth-grade diagnostic basic skills test;

5. The percentage of students who passed each section of the test given in 1979;

6. The extent to which responding educators participated in developing test items for the 1979 test;

7. The number of respondents who believed that the test was racially discriminatory;

8. Attitudes about teachers having prior knowledge of test items, who should revise the test, and how often;

9. The match between test items and the objectives of individual schools; and

10. The age range, areas of certification, number of years experience, and the highest level of education attained by the respondents.
The following hypotheses, stated in the null format, were considered relevant to the study:

1. There will be no significant relationship among the attitudes of eighth-grade teachers toward minimum competency testing.
2. There will be no significant relationship among the attitudes toward minimum competency testing of principals who supervise eighth-grade teachers.
3. There will be no significant relationship among the attitudes of superintendents toward minimum competency testing.
4. There will be no significant relationship in the attitudes of eighth-grade teachers and their principals toward minimum competency testing.
5. There will be no significant relationship in the attitudes of eighth-grade teachers and their superintendents toward minimum competency testing.
6. There will be no significant relationship in the attitudes of principals who supervise eighth-grade teachers and their superintendents toward minimum competency testing.

Significance of the Study

Minimum competency testing was an important and complex issue in the development of education within the United States. The movement began in the Denver, Colorado, public schools in 1960, but competency testing was not adopted in any state for statewide implementation until 1972, when the Oregon State Board of Education passed a resolution
requiring its 1978 graduates to demonstrate proficiencies in 20 areas. California and Florida followed in 1975 with similar legislation (Pipho, 1978b). As of February, 1980, 38 states had taken action to set minimum standards for elementary and/or secondary students.

Competency testing was a logical response to the public's demand that educators "do something" about what they believed to be dangerously declining standardized test scores across the country. The "bandwagon" effect of the minimum competency testing movement decreased considerably, however, in 1978. Hasty state legislation gave way to more preliminary study by state departments of education and school districts. Earlier testing in elementary schools, with more emphasis on remedial work, gained in popularity.

Many questions had arisen which required thoughtful consideration before any state could adopt an effective statewide competency testing program (Brickell, 1978; Van Til, 1978):

1. What skills should a student have to be minimally competent?
2. Who should determine the level of minimum competency?
3. What would be the major purpose of a minimum competency test?
4. What types of tests should be given and by whom should they be developed?
5. Which grade levels should be tested?
6. Who could be exempted from the tests?
7. Would failing students be isolated from the remainder of the student body?
8. Would there be efforts to encourage failing students to stay in school?
9. Would teachers be retrained to administer remedial help more effectively?

10. Would remedial programs drain teachers and money from regular school programs?

11. Would the tests reflect cultural or racial bias?

12. Would remedial programs result in a "tracking" system that resegregated students within a school?

Professional educators within a state should share common attitudes toward minimum competency testing in order for testing to become a positive educational tool. Administrators and teachers should know how each could support the efforts of the other to reap the greatest benefits from such a statewide testing program. Each educator should have some input into the development and implementation of the tests, either directly or indirectly. Cooperative efforts on behalf of all educators should be assured if minimum competency standards and testing programs were to ultimately result in improvement of the educational achievement of students.

Competency testing was adopted by the Tennessee State Board of Education on November 10, 1977, after more than a year of study by a state committee on high school graduation requirements (Appendix A). The mandate provided for statewide diagnostic and proficiency testing in the basic skill areas of mathematics, spelling, language, and reading. Students were to be tested for diagnostic purposes in either the fourth, fifth, or sixth grade, and again in the eighth grade. A high school proficiency test would be required for graduation purposes, beginning with the graduating class of 1982. The high school test would be administered
to eleventh graders, beginning in the spring of 1981, with two additional opportunities for retesting, if necessary, in the twelfth grade.

This study was designed to obtain information about the attitudes of selected superintendents, eighth-grade teachers, and their principals in the public schools of Tennessee toward minimum competency testing. Persons selected for inclusion in the study had direct knowledge of the administration of the eighth-grade diagnostic basic skills test to the eighth graders of Tennessee in April, 1979, as a prerequisite for the high school proficiency examination to be administered to them as eleventh graders in the spring of 1981.

Assumptions

The following assumptions were considered relevant to this study:
1. There was a need for a study of this nature.
2. The randomly selected respondents were representative of the total population of public school educators in Tennessee.
3. The personnel who responded to the questionnaires were aware of their attitudes toward minimum competency testing.
4. The personnel responding to the questionnaires were honest in their answers.

Delimitations of the Study

This study was limited to a review of related literature, a personal interview with William Crockett of the Tennessee State Department of Education, Nashville, and the responses to questionnaires mailed to three eighth-grade teachers, three principals, and their superintendents in each of 36 public school systems in Tennessee selected by stratified
random sampling. A return of 40% of the questionnaires was considered adequate for the study. The study was conducted in the spring of 1980.

Definitions of Terms

Applied Performance Testing

Applied performance testing measures performance in an actual or simulated setting. Examinees must actually demonstrate the ability to perform required tasks, such as writing an essay, solving an equation, or passing driver training (Clark & Thomson, 1976).

Basics

Subject areas considered to be basic to adequate functioning in society are reading, writing, and arithmetic (Coombs, 1979; Hechinger, 1978).

Back-to-Basics Movement

The back-to-basics movement is a grass roots challenge by parents for educators to place more emphasis on reading, writing, and arithmetic. The movement was encouraged by a desire to return to the "good old days" and to retreat from an uneasy society. Spearheaded by nonschool professionals—ministers, politicians, and leaders of community groups—the movement is without a singular thrust and without organized and identified leadership. Advocates of the movement want stricter discipline in the schools with more emphasis on good manners, patriotism, rules of deportment, penmanship, and quiet (Howe, 1979; Van Til, Brownson & Hamm, 1976).
Carnegie Unit

Fifty minutes per day in a subject for an academic year is one Carnegie Unit (Glass, 1978a; Nathan & Jennings, 1978a).

Competency, Proficiency, or Skill

Competency is defined as the ability to execute a useful task to publicly agreed upon standards of performance (Haney & Mudaus, 1978).

Concurrent Validity

The extent to which a test may be used to estimate an individual's present standing on a criterion is concurrent validity. Concurrent validity should not be used as a substitute for predictive validity, as concurrent validity reflects only the status quo at a particular time (Martuza, 1977, chap. 10).

Construct Validity

Construct validity is evaluated by investigating which qualities a test measures. Construct validity determines the degree to which certain explanatory concepts or constructs account for performance on the test (Martuza, 1977, chap. 10).

Content Validity

A test that contains a representative sample of tasks which defines the area to be tested has content validity. The preparer must have a clear definition or description of the content domain and knowledge of the procedures used to select the sample of items which constitutes the test in question (Martuza, 1977, chap. 10).
**Criterion**

A criterion is a standard by which a test may be judged or evaluated. A set of scales or ratings with which the test is designed to correlate may be a criterion (Karmel, 1970, chap. 4).

**Criterion-Referenced Test**

A test that is deliberately constructed to yield measurements that are directly interpretable in terms of some specified behavioral criterion of proficiency is a criterion-referenced test. These tests are not designed to determine an individual's relative standing in some norm group. Rather, this type of test indicates what an individual can or cannot do with certain specific requirements (Clark & Thomson, 1976).

**Curricular Validity**

Curricular validity is the measure of how well test items represent the objectives of the curriculum. A comparison of test objectives with the course objectives of a school may be made to determine curricular validity (McClung, 1978).

**Functional Literacy**

Persons who are functionally literate must have the minimal ability to communicate by reading, writing, speaking, and listening. They must know some arithmetic, be able to solve problems, and be able to handle relationships in the five basic areas of occupational knowledge: consumer economics, health, community resources, government, and law (Cole, 1977).
Instructional Validity

Instructional validity is a measure of whether or not the stated objectives of a school are translated into topics which are actually taught in the classrooms (McClung, 1978).

Minimum Competency Testing

Selecting and defining competencies necessary for success, establishing minimum levels of proficiency, and developing tests to determine whether or not the standards are being met constitute minimum competency testing. Minimum competency testing is separate from state assessment programs, which seek to determine whether the learning of students, on the average, is improving or not (Beard, 1979; Education Commission of the States, 1978; Lewis, 1979a).

Norm-Referenced or Standardized Test

A survey test designed for normative interpretation is a norm-referenced test. These tests are commercially prepared by measurement experts, and they provide methods of obtaining samples of behavior under uniform procedures. The same fixed set of questions is administered with the same set of directions and timing constraints. The scoring procedure is carefully delineated, uniform, and usually objective. The standardized test has usually been administered to a norm group or groups so that an individual's performance can be interpreted by comparing it to others (Mehrens & Lehmann, 1973, chap. 1).

Predictive Validity

The extent to which an individual's future level of performance on a criterion can be predicted from knowledge of prior test performance
is predictive validity. Included in this type of validity is a time interval during which something may happen (Martuza, 1977, chap. 10).

**Reliability**

Reliability is the consistency between two measures of the same thing. Psychological and educational measurements are typically much less reliable than physical measurement. When dealing with people, consistency is determined by measuring a number of individuals twice and comparing the relative standings of the individual on the two sets of measurements or scores (Kerlinger, 1964, chap. 24; Noll & Scannell, 1972, chap. 5).

**Validity**

The degree to which a test is capable of effectively making predictions about the individual tested and describing him is called its validity. Does the test measure what it purports to measure? To be valid, a test must be reliable as well (Mehrens & Lehmann, 1973, chap. 2; Stanley & Hopkins, 1972, chap. 4).

**Procedures**

Procedures utilized during the conduct of the study were:

1. A review of related literature was conducted.

2. William Crockett, Tennessee State Department of Education, Nashville, was interviewed in March, 1980, concerning all phases of the implementation of minimum competency testing in Tennessee.

3. Three questionnaires were designed to obtain data relevant to attitudes of superintendents, principals, and eighth-grade teachers.
toward minimum competency testing in the public schools of Tennessee where the eighth-grade diagnostic basic skills test was administered in 1979.

4. The questionnaires were field tested in two public school systems in Tennessee to determine their validity. A letter was included to explain the study.


6. The systems were divided into six enrollment categories, highest to lowest, and 36 systems were selected by stratified random sampling, with a proportionate number of systems from each of the enrollment categories.

7. The superintendents of each of the 36 school systems selected for inclusion in the study were mailed a letter explaining the intent of the study and asking for assistance in completing the study.

8. One week later, each of the superintendents was mailed a packet of seven questionnaires to distribute in the following manner: three to eighth-grade teachers who had administered the eighth-grade diagnostic basic skills test in 1979, three to their principals, and one to the superintendent. A letter reiterating the purpose of the study was also included. Return envelopes were provided.

9. One month later, a follow-up packet of questionnaires and return envelopes was mailed to those systems which had not already responded, along with a letter asking for assistance.

10. Replies were collected and categorized as received.
11. When a predetermined optimum number of questionnaires was returned, data were analyzed and recorded in tables.

Organization of the Study

The study was organized into five chapters. Chapter 1 contains an introduction to the study, statement of the problem, sub-problems, hypotheses, significance of the study, assumptions of the study, and delimitations of the study. Definitions of terms, procedures, and organization of the study are included as well.

A review of the related literature is presented in Chapter 2.

Procedures by which the study was conducted are contained in Chapter 3.

An analysis of the findings of the study is included in Chapter 4.

Chapter 5 includes the summary, conclusions, and recommendations of the study.
Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

The competency testing movement came about because of widespread public dissatisfaction with our nation's schools. The debate over the public school system in the late 1970's was concerned with functional literacy, accountability, and equal educational opportunity. The public cry for "back-to-basics" education prompted legislative or administrative action which required testing of high school students for minimum competence in basic communication and computation skills (Lewis, 1979a).

Joseph Beckham (1980) stated that minimum competency testing became a popular issue because it appeared to remedy concerns of the public about the integrity of the educational program. He added that minimum competency testing would restore the meaning of the diploma, reinstate an emphasis on cognitive development and reinforce the popular demand for a return to basics, and motivate teachers and students to work purposefully toward defined educational goals.

History of Competency Testing

In 1862 the British instituted a plan for minimum competency testing called the Revised Code, or, unofficially, the "Payment by Results Plan" (Glass, 1978a). Schools were to receive funds only for those students who had attended a minimum number of times and who could demonstrate proficiency in reading, writing, and arithmetic. For each student who
failed tests in the basic subject areas, a school forfeited one-fourth of its per-capita allotment. The examinations were administered every year, and the specific levels of competencies required for passing the basic subject area tests were spelled out in the Code (Tuman, 1979).

The Code resulted from political pressures of the times. England experienced a rapid growth in state aid to education around 1860, and taxpayers felt they were not receiving enough benefits for their tax dollars. Matthew Arnold, a school supervisor during the time the Code was in effect, complained that competency testing was a politically motivated attempt to redress the educational results of long-standing, complex social, economic, and historical inequities (Glass, 1978a; Tuman, 1979). He also feared that specified levels of competencies would become the goals of education.

The Code remained in effect until 1897, when the damaging effects upon the morale of teachers became apparent. A different examination system was then devised, which has been in use during this century.

Similar tests were used in this country in the 1800's. Boston public schools gave the Common Exam in the 1840's, and New York State administered the Regents' Examination in 1877. Rural schools commonly administered a competency examination at the end of eighth grade in the early 1900's. Ireland gave a minimum competency test at the end of sixth grade from 1943 until 1967, when the teachers union abolished it (Haney & Madaus, 1978; Riegel & Lovell, 1980).

Joe Nathan and Wayne Jennings (1978a) and Gene Glass (1978a) described the reform movement to increase the value of the high school diploma in the United States that began around the turn of the century. The Carnegie Foundation for the Advancement of Teaching set out to
discover what standards most high schools in this country required students to meet before granting a diploma. The research of the foundation revealed that most secondary schools required similar instruction time units for a student to have optimal learning opportunity in a subject. The foundation labeled the most widely accepted time unit--50 minutes per day for an academic year in a subject--the Carnegie Unit. By 1927, because of intense pressure from the foundation on secondary school administrators to insure uniformity in secondary educational programs, students had to complete 14 Carnegie Units to earn a high school diploma or to be eligible for college admission.

The Carnegie Unit thus became the measuring device to determine whether a student would be graduated from an American high school. The British system of examinations was not adopted universally in this country because there was no demand for that type of achievement assurances in the 1920's. The educational system of secondary schools continued relatively undisturbed until "rumblings" of discontent began to be voiced in the fifties.

"Back-to-Basics"

Many educators shared the belief that the Carnegie Unit alone was not a sufficient indicator of a student's competency in the basic skills, because the value of the high school diploma came under vigorous attack from employers, parents, and students themselves. Concern was expressed by the public and the profession that too many high school graduates were deficient in the ability to solve problems; were unable to demonstrate entry level career skills, develop good interpersonal
relationships, compute well enough to be intelligent consumers, or read sufficiently to follow job instructions; and were ignorant of basic safety rules.

James Clark and Scott Thomson (1976) indicated that qualification for the high school diploma should include verification by course and by competency. A diploma, they felt, should signify that the holder possessed the skills to obtain the information necessary to be a citizen and a worker. Graduates should be competent in the basic skills at a level sufficient to learn job specifications or to pursue the requirements to enter postsecondary education.

The National Association of Secondary School Principals (NASSP) (Clark & Thomson, 1976) recommended that a high school graduate have:

1. an ability to read, write, and compute with specified proficiency (functional literacy);
2. an acquaintanceship with the American experience—democratic governance;
3. successful completion of a series of courses and/or planned experiences, some involving a group setting; and
4. sufficient attendance and successful completion of credits.

Scrutiny of public education intensified in the late 1960's because of campus unrest, student upheaval, and a cry for more relevant curricula in the nation's colleges. The criticism extended to elementary and secondary schools. The public wanted educators to be responsible for producing certain educational outcomes in return for the tax dollars invested in public education (Spady, 1977; Spady & Mitchell, 1977).

Accountability, as the concept evolved in the 1970's, was a comprehensive concept that included performance, professional, and
system accountability (Knezevich, 1975). It required a review of the effectiveness of strategies, relevance of goals, and an assessment of educational outcomes. It was based upon specification of desirable and measurable outcomes, assignment of responsibility for achievement of objectives, and assessment.

Stephen Knezevich concluded that a wide variety of educational objectives existed and that results were difficult to measure because human learning was involved. Teachers would be held accountable for pupils learning up to a specified level, but that type of accountability raised many theoretical and practical concerns among knowledgeable people. The primary purposes of accountability were to focus on objectives, to fix responsibility, and to optimize relationships between human resources, physical resources, and/or monetary results.

A preponderance of literature in the seventies advocated the "back-to-basics" movement to cure the ills of education (Lemke, 1977). What were the basics of education? Which courses should be eliminated? Should reading and writing teachers concentrate all their efforts on skill development? Should schools admit that they had taken on too many responsibilities, leaving little hope of success? A consensus of what was basic in education was lacking. How could educators be accountable for something so ill-defined? If a decision could be made as to what was basic, schools could implement curricular models or require each teacher to teach the basics as indicated by school and community wishes.

Gordon Cawelti (1978) added that before requiring strict accountability of educators for teaching the "basics" to every child, the public should take note of the effects of television, permissiveness in the family, women's liberation, higher divorce rates, demographic
changes in the population, the decline of religion, the civil rights movement, the influence of court decisions, increased federal regulation, forced busing, and a general crisis of values on a child's learning ability. Nevertheless, the political atmosphere in the seventies was conducive to any process that would make schools accountable for certain outcomes and force them "back-to-basics" (Beard, 1979).

Minimum Competency Testing

Minimum competency testing had great appeal for citizens and politicians who were convinced that the quality of the nation's schools had eroded. Declining test scores and grade inflation had created suspicion about the achievement standards that teachers used to evaluate and grade students (Beard, 1979). Enthusiasm for minimum competency testing stemmed from the belief that testing of essential skills and competencies would help raise academic standards and increase educational achievement. Required certification of competencies would also prevent schools from passing incompetent students through the grades on the basis of social promotion (Haney & Madaus, 1978).

Competency testing could be implemented solely as a requirement that a student must meet in order to receive a diploma. At the elementary level, however, competency testing could have as its purpose the identification of learning disabilities with emphasis on remediation and guidance. Thirdly, competency testing could serve to evaluate the progress of a particular school in attaining educational goals established by the district (Beckham, 1980).

Teachers and administrators generally supported minimum competency testing, according to Jacob Beard (1979), because it operationalized
previously vague concepts of accountability and because it motivated low-achieving students to study. The imposition of minimum competency requirements added credibility to the teachers' claims that their underlying instructional objectives were worthwhile by attaching a specific reward to their mastery.

Jim Mecklenburger (1978) summarized the minimum competency testing idea. He said that the state owed every child an education, so, upon graduation from high school, he should be minimally competent, at the very least. Schools should be held accountable for seeing to it that every child was minimally competent, and, to assure that this occurred, every child should be tested. A controversy arose, however, over agreement as to the kinds of indicators to be used as evidence of achievement, the ways achievement could be documented, levels of outcome desired, the procedures to be followed in judging performance, and the remedial processes needed.

Several questions were voiced by critics about the use of minimum competency testing as a requirement for high school graduation (Bracey, 1978; Cawelti, 1977; Mecklenburger, 1978):

1. From how many students could a school district withhold diplomas?
2. What would happen if "too many" failed the test?
3. Should the passing score be lowered or an easier test developed?
4. Should there be different "minimums" for different students?
5. Should teachers teach test-taking?
6. Should official adoption of the testing program be postponed?
7. Should schools be willing to specify what they "guaranteed" each student would learn?
8. If not, how could they require a test?
9. If so, how elementary would the test have to be so that most students could pass?

10. If the competencies were so easy that everyone could pass, would the schools look foolish?

11. What would happen if some students dropped out of school to avoid taking the test?

12. What would happen when graduates who passed the test were still not judged competent by potential employers?

David Moore (1979) commented that the movement toward minimum competency testing was widespread and growing, but that its educational and social implications had yet to be evaluated. Robert Krajewski (1979) warned against beginning with a high school graduation test only. He suggested implementation of minimum competency testing first at the end of the primary grades, then the intermediate grades, junior high, and ninth grade.

More current legislation enlarged the scope and purpose of competency testing to require school districts to adopt proficiency standards in basic skills, to assess pupil performance periodically from entry level through twelfth grade, and after a specified period of time elapsed, to deny a diploma to any student who failed to meet locally adopted proficiency standards (Beckham, 1980). Statutes also included procedures for timely notice to students and parents, proposals for citizen participation in establishing standards, and provisions for state department of education assistance in developing assessment instruments and testing procedures.

Krajewski added that problems could be avoided if educators understood what was involved in setting up minimum competency standards.
He advocated involving teachers early in the planning process, keeping the public informed, and maintaining reasonable expectations about the length of time necessary for improvement to be evident (1979). Teachers should be alert to opportunities to design the tests in such a way as to provide feedback for the teaching process (Fiske, 1979).

Many possible negative outcomes of the minimum competency testing movement were listed by William Van Til (1978). He believed that the movement would create new problems for blacks, Indians, Mexican-Americans, and other minority young people who had attempted to stay in school. Dropping out by students who failed the literacy tests, lawsuits against the tests, cramming and teaching for the tests, required remedial classes, and struggles by educators to obtain sufficient funds to support remedial work were other factors to be considered. He outlined five sequential activities that might occur as well and affect the adults involved in the minimum competency testing movement:

1. The school boards could ask for required "basic skills" tests for all teachers.

2. Opposition to this requirement would be voiced by teachers' unions and other teacher groups.

3. The legislature would then mandate required literacy tests for presently employed teachers.

4. Some political influential would support this type of testing.

5. Scapegoating and blaming would result.

These activities would diminish the benefits that many thought inherent in a competency testing program.
Implementation Problems

Theoretical Concerns

Several problems associated with minimum competency testing were discussed by George Madaus and Peter Airasian (1977). They stated that once minimal competencies were set, the school's responsibility to foster the specified competencies was explicit. The implication was that schools were capable of teaching those competencies. The tendency to focus upon the starting and ending points of instruction, with insufficient concern for the process of education, existed as well. When goals were defined, attention turned to the evaluation of those ends attained, and instructional activities were taken for granted. In the end, failure to attain minimal competence upon completion of high school was laid at the feet of the student, not the teachers.

Another consideration was too much emphasis upon recall. In the rush to implement competency-based programs, Madaus and Airasian felt that skills were reduced to levels that could be tested by recall, the easiest type of knowledge to measure. Miriam Chaplin (1979) maintained that basic skills could not be measured by a paper-and-pencil test, especially if the test sought to measure learning how to learn, how to live cooperatively in a pluralistic society, and the development of dignity and respect for one's self, as well as for others.

How could social, personal, and career development competencies be categorized as skills and measured by tests of recall? Writing test items to measure competence in filling out loan applications, balancing a checkbook, comprehending the local newspaper, using the public library, and completing a tax form would be a difficult task. Knowing that a
student understood the theory or components of a competency was not the same as knowing he could actually perform it (Madaus & Airasian, 1977).

Rodney Riegel and Ned Lovell (1980) summarized the tasks that administrators and teachers should consider in the process of implementing a minimum competency testing program:

1. Decide which competencies to test;
2. Determine how to measure the competencies;
3. Decide on the number and timing of the tests (grade levels);
4. Establish a cut-off score or minimum standard;
5. Decide how the minimum competency test was to be used; and
6. Decide how to deal with failing students and diploma alternatives.

Test Construction

An important point to consider was the time needed for testing and test construction. Many educators did not think it was fair to evaluate their programs with standardized achievement tests, because the goals of the programs were not reflected by such instruments (Madaus & Airasian, 1977; McClung, 1978). Bernard McKenna (1979), Allan Nairn and Associates (1980), and Nathan and Jennings (1978b) believed that standardized tests did not measure or predict those factors related to success as an adult in any case. Nairn reported that in 827 Educational Testing Service (ETS) validity studies conducted between 1964 and 1974, the SAT was more accurate than chance only 11.9% of the time in predicting first year college grades. He and his associates concluded that information about past accomplishments was the best predictor of future accomplishments. Shirley Hufstedler, America's first secretary of
education, commented that ETS reduced the aspirations and opportunities of countless working-class, poor, and minority persons by promoting a class-determined test (Connell, 1980).

Criterion-referenced tests were felt by many educators to be more fair and democratic than normed tests. By using specific behavioral objectives, performance tests as measures of progress for individual students were logical means to verify basic skills to meet graduation requirements (Clark & Thomson, 1976). Criterion levels could be set by a school district in defining the competencies it considered important. Teachers could then evaluate the individual test items for content validity and for level of difficulty.

For a minimum competency test to be fair, it should have content validity, curricular validity, predictive validity, and instructional validity. A school system that could not assure these validities of its competency test should not use it to deny promotion or a diploma to any student (McClung, 1978). The test should show no social, cultural, sexual, or ethnic bias. Therefore, many educators felt that competency tests should be prepared locally.

If a student were to be given more than one opportunity to pass the competency test, the same test exercises could not be used over and over. If the test were to be taken seriously, new exercises had to be developed frequently. Trained personnel would be needed to construct appropriate competency measures to match the objectives of the school. Nowhere was the risk of legal arbitrariness potentially greater than in the area of congruence between what was taught and the content of a minimum competency test (Riegel & Lovell, 1980). Therefore, the reliance on non-experts to prepare criterion measures would increase the
likelihood of court cases related to the validity and reliability of the competency criteria.

Mart Appelbaum (1979) warned that a competency testing program could be no better than the instruments it used to assess competency or the set of judgments it made as a result of testing. He added that, although consideration of all types of validity in preparing a competency test could not insure a good program, failure to attempt to do so could assuredly produce failure.

Most critics of education cited declining SAT scores as evidence that something was wrong with the educational system. Roger Farr and Jill Olshavsky (1980) reminded them that the SAT was not a test of minimal literacy and could not reveal how basically literate high school juniors and seniors were, and certainly could not reveal the status of minimal literacy for students in all grades. Toughening academic standards by mandating minimum competency testing for graduation from high school or promotion to the next grade was the most common reaction to the problem of declining test scores. However, Farr and Olshavsky pointed out that a standardized achievement test designed for college-bound juniors and seniors in high school bore little resemblance to a minimum competency test designed to test basic literacy. Therefore, scores on the SAT should not be cited as an indication that there was widespread lack of basic literacy for this group.

**Cut-Off Scores**

The determination of how high standards would be set and a cut-off score was largely political. If no one failed the minimum competency test, it would become meaningless and educators would be criticized for
setting the standards too low. If too many students failed the test, the financial costs of remedial education would be prohibitive (Riegel & Lovell, 1980).

James Fillbrandt and William Merz (1977) stated that the greatest problem in establishing cut-off scores was determining the score which would distinguish those students who were to be judged competent from those who were to be judged incompetent. They concluded that the only reasonable standard would be that derived from determining the performance levels of successful persons in the community on the competency test. When proficiency standards were defined in terms of the competencies existing in the local job market rather than in abstractions derived from texts or the manuals of nationally normed tests, negativism about the test could be neutralized. Ralph Tyler concurred with their solution (Brandt, 1979).

In a recent National Education Association (NEA) teacher opinion poll, 90% of the teachers surveyed favored higher standards for student performance ("NEA Teacher Opinion Poll," 1979). In setting a minimum standard for competency, a possibility existed that minimum standards could become the maximum expectations for students. The determination of cut-off scores should reflect consideration of any inhibiting effects of standards that were set too low (Chaplin, 1979).

**Differential Standards**

No uniform procedure existed nationwide for awarding diplomas to handicapped students. Only eight states had or were developing procedures in 1979 for giving competency tests to handicapped students. California, Maryland, and Utah required all handicapped pupils to take competency
Florida, Massachusetts, and New York administered the tests to students with specific categories of disabilities (Pipho, 1979).

For mentally handicapped learners, no amount of testing, establishment of standards, or remedial programs could cause these students to achieve beyond the limits of their intellectual capacity. Howard Dunlap (1979) posed the question of how low the standards would have to be if children with IQ's of 70 to 90 (20% of the total school population) were not to be trapped by the program imposed. He argued that the student who was diligent enough to reach the grade level necessary for high school graduation should not be denied a diploma on the basis of a minimum competency test. Dunlap did not feel that an arbitrary cut-off score was needed for slow learners who had struggled hardest. They should not be set apart by a stigmatized diploma that prevented them from using the various coping skills they had developed and, hence, kept them from being contributing members of society. He declared that educators should not insure their failure by imposing standards that they could not attain.

**Remediation**

Most minimum competency testing programs considered the necessity of remediating the educational deficiencies of those students who failed the tests. Although the majority of educators saw remediation as a necessary and positive outcome of the testing program, Chaplin (1979) felt that remediation could not bring a student up to an acceptable level without great difficulty. She surmised that a student could not understand isolated skills as meaningful to his academic or personal life, and added that there was no need for separation and isolation for
remedial instruction when the curriculum was varied enough to accommodate individual learning styles. In summary, she believed that remedial education could be in direct opposition to developmental education, referred to an isolation of skill deficits and instruction aimed at eliminating those deficits, and could lead to teaching for the test rather than for growth.

Financial Issues

The cost of implementing minimum competency testing was one of the least explored areas. Proponents of the movement believed that testing would make education more acceptable, lead to more efficiency, and result in tax savings. However, these outcomes were not documented.

Riegel and Lovell (1980) listed eight areas of the testing program that required financial commitment:

1. Set-up costs of legislation (hearings, data collection, and studies);
2. Implementation costs (piloting, modeling of proposed legislation);
3. Information costs (preparing and revising plans to meet legislative mandates);
4. Administrative costs (record keeping and reporting expenses);
5. Enforcement costs (staff to monitor, evaluate, and police);
6. Test development costs (average $100 per test item);
7. Test administration costs; and
8. Remedial programs.
They added that remediation was the high cost item in most states. For example, the state of Washington spent in excess of $85 million for remedial programs in reading and math in 1979.

Robert Feldmesser (1978) asserted that meeting minimum competency standards was an individual right if the standards represented skills that one needed to survive in contemporary society. Therefore, he felt, the individual had the right to remedial instruction at public expense for as long as necessary for him to pass the minimum competency test.

Grann Lloyd (1980) decried the waste of public monies when a child spent 12 years in school and was then denied a diploma. He added that allowing students to attend high school when they had not mastered the basic skills bordered on social injustice. To deny a student a diploma because he failed a sub-high school test could lead to crime and delinquency, initiate welfare dependency, impose cultural deterioration, and aid and abet vagary and vagrancy, according to Lloyd.

Lloyd also indicated that a decrease in lifetime earnings would result if the use of tests increased the volume of school dropouts and pushouts. Society would be victimized by the increased cost of welfare and crime. Lowered productivity and increased welfare in 1979 alone caused an expenditure of $6 billion. Lloyd concluded that politicians and weak educators had actually created a much worse situation by trying to save the "integrity" of the high school diploma.

Legal Considerations

Although educators did not agree that minimum competency testing was the best means of remedying functional illiteracy, few disagreed that
care should be taken to insure that programs were designed and implemented in a fair and non-discriminatory manner (McClung, 1979; Washington, 1979). To proceed in ignorance or defiance of federal and state constitutional and statutory laws was shortsighted because the various governmental agencies charged with their enforcement were joined by a national network of legal services and attorneys who had special responsibility to represent minorities and low-income clients. Merle McClung (1979) believed that preventive law was less often and less effectively practiced in public education.

Jon Getz and Gene Glass (1979) implied that minimum competency testing programs implemented in some southern states showed little understanding of the psychology of learning, the management of instruction, or the improvement of schooling because of hasty acceptance of legislative mandates, thus leaving school systems an easy target for litigation. Donald Lewis (1979a) said that competency testing should not become the vehicle for sacrificing other constitutional values such as fair process and equal educational opportunity, and added (1979b) that the three major problems that could lead to legal entanglements were: (1) not measuring accurately what the students knew, (2) testing areas in which students had not received instruction, and (3) using the test to the disadvantage of minority students.

Educators aware of the legal implications of minimum competency testing should make every effort to develop systematic processes to identify, counsel, and remediate the learning deficiencies of students and to inform and counsel parents. They should allow differential standards and assessment procedures for the learning disabled and provide educational options to students initially denied the diploma (Beckham,
Differences in the approach of a state to minimum competency testing created special legal problems for specific states. The right of a state to require minimum competency testing was acknowledged and supported, and added to the basic legal precedents that supported the right of the child to an education. Understanding the relationship of both would help educators avoid litigation involving minimum competency testing, according to Beckham (1980).

**Equal Educational Opportunity**

Equal educational opportunity required the states to provide access to schooling that met the needs of the individual and guaranteed a minimal level of quality in the provision of educational services. When testing was used to deny a diploma (an educational benefit), then it could be argued that it was being used to deny equality of educational opportunity. Where that denial seemed arbitrary or capricious, the likelihood of litigation increased. Court cases that upheld the principle of equal educational opportunity were *Brown v. Topeka Board of Education*, 1954; *Hobsen v. Hansen*, 1967; *Lau v. Nichols*, 1973; *Serrano v. Priest*, 1976; and *Robinson v. Cahill*, 1976 (Beckham, 1980).

**Discrimination Under the Fourteenth Amendment**

In *Green v. Hunt*, 1979, black students claimed that the North Carolina minimum competency test discriminated against the disadvantaged by excluding minorities from the educational process and subsequently from the job market. Ability grouping based on testing was prohibited where there was a disproportionate racial impact that tended to perpetrate past patterns of racial discrimination (Neill, 1979). No intent to discriminate had to be established (Beckham, 1980).
**Discrimination Under Title VI of the Civil Rights Act**

Title VI prohibited any practice that would have a restricting effect on an individual because of race, color, or national origin in the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit. Cases that dealt with this right were *Hobsen v. Hansen*, 1967; *Lau v. Nichols*, 1973; and *Diana v. California State Board of Education*, 1970 (Beckham, 1980; Lewis, 1979a).

**Discrimination Under the Rehabilitation Act of 1973 for the Handicapped**

According to a 1979 survey conducted by the National Association of State Directors of Special Education (Beckham, 1980), no uniform procedures existed nationwide for awarding diplomas to handicapped students. Any policy that excluded a handicapped student from participating in minimum competency testing programs would appear to violate the requirement to integrate the student into the regular educational program. On the other hand, failure to provide differential standards and alternative modes of testing could violate the individual's right to meaningful programs for the handicapped.

**Due Process of Law**

Minimum competency testing could presently conflict with state laws which guaranteed the right to public school education in cases where minimum competency tests were used to determine placement in remedial or special education classes or where testing programs could be responsible for denying a diploma. Black students who failed the 1978 minimum competency test in Florida alleged that they were denied equal protection
and due process of law under the Fourteenth Amendment. Debra P. v. Turlington, 1979, resulted in a court order to grant the high school diploma to students who failed the test but otherwise qualified for graduation. Because of the past pattern of racial segregation in Florida that resulted in an inferior education that continued to affect the achievement of black students, the court postponed the phase-in period of the minimum competency requirement for high school graduation in Florida until 1983 (Beckham, 1980).

Denial of a Liberty Interest

If the placement of a student or the denial of the diploma was based upon inaccurate measures of ability or improper interpretation of measures used in a minimum competency testing program, the test could be subject to legal challenge on the ground that it denied the student's right to liberty without affording the student due process of law (Beckham, 1980).

Fundamental Fairness and Reasonableness

Courts that were guided by notions of what was reasonable notice and fairness to the student were reluctant to interfere in matters of educational policy where legislative action or school board policy was based upon carefully reasoned judgments about appropriate testing requirements. Decisions about minimum competency testing were within the competence and discretion of professional educators, provided the consensus of expert judgments was based on sound educational thinking (Beckham, 1980; McClung, 1980). In Florida State Board of Education v. Brady, 1979, a state appeals court upheld scoring criteria for minimum
competency testing adopted by the Florida Commission of Education as valid exercises of administrative authority. The court also ruled that proficiency in any subject was uniquely a matter for the field of education to decide (Beckham, 1980).

Educational Malpractice

Educational objectives were necessary to establish the relationship between that which was taught and the competency standard imposed. Failure to provide clearly stated objectives could leave schools open to charges of denial of due process or arbitrary and capricious action.

On the other hand, clearly specified objectives could create a legal duty of care that could permit a lawsuit based upon the breach of a duty to educate. In Peter W. v. San Francisco Unified School District, 1976, the court could find no objective legal standards that clearly established the school district’s duty in educating students. A similar case was Donohue v. Copiague School District, 1978 (Beckham, 1980; McClung, 1980).

Until 1978, public policy arguments appeared to be in favor of the school districts. However, in 1978, a case of gross violation of statutory duty to educate was filed in New York in which damages of $500,000 for psychological and emotional injury to the child were recoverable. The case was Hoffman v. Board of Education, 1978. The child involved was classified from the age of 6 to 17 as mentally retarded, even though he was not retarded. A minimum competency testing program could create statutory and school district policy standards that could be the basis for an educational malpractice suit (Beckham, 1980).
Procedural Safeguards

Procedures to minimize litigation involving minimum competency testing were discussed by Beckham (1980), McClung (1980), and Shirley Neill (1979). These procedures are listed below:

1. Specifications of minimum competencies should be matched with curricular goals and objectives of the school system.

2. Evidence that actual instruction was congruent with curricular objectives and test items should be obtained.

3. Test items should conform to curricular objectives and have no bias related to racial, ethnic, or national origin minority status.

4. Other measures besides the minimum competency test should be used for placement or awarding of a diploma.

5. Attempts should be made to overcome cultural biases inherent in the construction and administration of the competency test.

6. Cut-off levels should be the result of documented deliberation and should avoid any suggestion of capriciousness.

7. The phase-in period should include early and repeated notice to students and parents.

8. The phase-in period should depend in part upon the time required to make the necessary curriculum and instructional changes to implement a competency-based education program. Six years notice was a precedent set by the court in Debra P. v. Turlington, 1979.

9. Notice would extend to the instructors' classroom comments, as well as official written notification to students and parents.

10. The initial minimum competency test should be used primarily for the identification and diagnosis of learning deficiencies.

11. Options should be available to students who failed the test.
12. Options should be available to students who were previously enrolled in racially segregated schools.

13. Remedial programs should not be so pervasive as to force "tracking" in all courses.

14. Handicapped students required individual determination with regard to the nature and extent of their participation in minimum competency testing programs.

**Program Models**

A model program for minimum competency testing would provide for representative community-based participation in the decision-making process, and would include a valid test that measured what the school had taught. The program should reflect all aspects of our pluralistic society; utilize a lengthy phase-in period; provide multiple learning, evaluation, and remedial opportunities; and encourage shared responsibility for performance by students and educators (McClung, 1978).

While there was considerable diversity in the legislative mandates of the 38 states that addressed minimum competency testing, three basic models of involvement emerged. Florida pioneered the state standards-state test model; Oregon developed the state standards-local test model; and Colorado utilized the local standards-local test model (Riegel & Lovell, 1980).

**Summary of State Activity**

Thirty-eight states had taken legislative action on minimum competency testing as of February 1, 1980, and 20 of those states had minimal competency testing standards that would affect regular high school
graduation: Alabama, Arizona, California, Colorado (local option), Delaware, Florida, Idaho (local option), Kansas (local option), Maryland, Michigan (local option), Nevada, New Mexico (proficiency endorsement on high school diploma), New York, North Carolina, Oregon, Tennessee, Utah, Vermont, Virginia, and Wyoming (Pipho, 1980).

Virtually all of the 38 states agreed that reading or communications and mathematics were basic skills. Other areas were added in some of the various states. For instance, Alaska required minimum competencies such as a demonstrated ability to float for two minutes, perform mouth-to-mouth resuscitation, read a marine chart, and answer questions about directions, water depth, rock and reef identification, and aids to navigation (Fiske, 1979; Nathan & Jennings, 1978b).

California and Florida were the only states to have a high school early exit program. Grade promotion was tied to minimum competency testing in Arizona for grade 8; in Kentucky for grades 3, 5, 8, and 11; in Maryland for grades 3, 7, 9, and 11; and in Florida for grades 3, 5, 8, and 11 (Pipho, 1978b, 1980). A complete list of the grade levels assessed by a minimum competency test in the 38 states is included in Table 1.

Legislation in 25 of the 38 states mentioned or implied that the tests would identify students who needed remedial assistance, but little mention was made about provisions in the state foundation formulas for remedial classes for students who stayed in school longer than 12 or 13 years to meet the minimal skill levels. Barry Anderson and Phillip Lesser (1978) believed that the compensatory education programs devised by the states were ill-conceived at best, and that they were destined to become enormously expensive, on-going programs.
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State Minimum Competency Tests:
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1 Once between grades 4-6
2 Once between grades 7-9
3 Twice between grades 10-11
4 Early & late elementary; secondary
5 Elementary; early & late secondary
6 Until mastery
Selected State Programs

Oregon

Oregon was the first state to have minimum competency graduation requirements. They were approved in September, 1972, and became effective with the graduating class of 1978. However, a statewide test was not provided.

Twenty areas under personal development, social responsibility, and career development were tested throughout the state. Standards for high school graduation were based on attendance, course requirements, and demonstrated performance. Local districts had the freedom to waive attendance and course requirements. Students could receive course credit by examination. Dale Parnell (1974), a former superintendent of Oregon schools, explained that the latest requirement, demonstrated performance, focused on real-life roles and competencies needed to cope with those roles.

New York

New York was the first state to give a statewide pilot competency test to students (ninth graders) in 1975. In March, 1976, the state Board of Regents adopted a policy requiring high school graduates to pass competency tests in reading and mathematics. The policy included proficiency in reading and math for 1979 graduates, but the policy was amended in 1977 to add competency tests in writing, practical sciences, health, and civics and citizenship for 1980 graduates. A third change dropped science, health, and civics and citizenship so that more emphasis could be placed on reading, math, and writing. More difficult
tests were planned to reflect standards that were the highest in the country.

No state remedial funding was provided in connection with the new competency requirements. Before adopting final standards on the new tests, the Regents set up a widespread review of the proposals of public and non-public educational groups and sought advice from other organizations and the general public (Frahm & Covington, 1979).

Arizona

The first state to have a graduating class subjected to state competency requirements was Arizona in 1976. All testing and assessment was done at the local level, and 1978 was the first year a state survey was conducted on the effects of the requirements (Frahm & Covington, 1979).

Arizona had a strong tradition of local control of education. Although the state had a low population, it had 230 public school districts. As part of an accountability movement, the state legislature mandated the Continuous Uniform Evaluation System (CUES). All districts had to develop learning objectives, pupil evaluation systems, alternative learning plans, a record-keeping system that followed students along, and a parent reporting system to keep parents informed of pupil progress. The proposal provided that students would receive special achievement endorsement certificates in addition to their regular diplomas if they performed at expected levels on their criterion-referenced tests at the end of grades 8 and 12 (Frahm & Covington, 1979).

Florida

Florida's 1976 Accountability Act mandated minimum graduation standards for the class of 1979. Accumulation of a minimum number of
course credits, mastery of basic skills, and satisfactory performance on the functional literacy test were required for graduation. The Fundamental Literacy Test was a 117-question measure of a high school graduate's minimal or "survival" skills. The 120,000 eleventh graders who took the test in October, 1977, had to pass it by answering 70% of the questions and "mastering" at least half of the measured skills in order to qualify for a high school diploma. The 36% who failed the math section and the 10% who failed the reading and writing sections were to participate in remedial programs designed by the local school districts. They had two chances to pass the test the following year. If they failed those, they would leave high school with a certificate of attendance, not a diploma (FiSkér, 1978; Frahm & Covington, 1979).

Because a disproportionate number of black high school juniors failed the test in 1977, the NAACP filed suit against state and local educators for discrimination. (The results of the case were discussed earlier.) Glass (1978b) reported that he would have called for an immediate suspension of the test because the test items "had never been validated as measures of 'survival skills' and the pass/fail standards were set mindlessly and capriciously" (p. 605). The test items were constructed by the Educational Testing Service, Princeton, New Jersey.

Florida was the first state to provide major funding for remedial programs for students who failed the competency tests. The state legislature appropriated $10 million for 1977-1978 and $26.5 million for the 1978-1979 school year for remedial training for students in all grades (Frahm & Covington, 1979).
California

Legislation enacted on January 1, 1977, created a public dialogue concerning high school graduation standards, restored meaning to a high school diploma by requiring students to meet locally developed standards, and encouraged schools to focus attention on students who had difficulty mastering basic reading, writing, or mathematics skills. School districts were required to adopt proficiency standards in reading, writing, and math, and to assess pupil performance once in grades 4 through 6, once in grades 7 through 9, and twice in grades 10 through 11. Beginning in July, 1980, school districts could not award a high school diploma to any student who did not meet local competency requirements. Materials were provided to the local districts by the State Department of Education to help them prepare standards, assessment exercises, and evaluation strategies (Hart, 1978).

Tennessee

The Tennessee State Board of Education imposed the proficiency testing requirement for high school graduation beginning with the class of 1982. Although efforts were made in the legislature to remove the proficiency test as a graduation requirement, the necessary votes were not received to pass the legislation as of April, 1980.

State education officials met in 1978 with groups of teachers in the state and developed 139 learning objectives for public schools. Through a survey of superintendents and 1,400 teachers, the number was later decreased to 80. These objectives (Appendix B) were published in the Rules, Regulations, and Minimum Standards (1979-1980).
In the spring of 1979 and 1980, eighth graders were tested on 50 objectives randomly selected from the 80. In 1979, 42% of eighth graders scored 70% or better on material written on a sixth-grade level. Data were not available for the results of the 1980 test ("69,592 Students," 1980).

Beginning in 1981, local districts were to administer their own diagnostic tests in grades 4, 5, 6, and in grade 8. No state remediation funding was provided.

Selected City Programs

Denver, Colorado

The Denver program was called "Proficiency and Review" and began in 1960, when a survey of local businessmen revealed that some graduates could not spell, do math problems, or fill out sales slips. The test was developed in cooperation with the California Test Bureau and had four basic areas: arithmetic, spelling, grammar, and reading comprehension. Seniors had to pass all four to receive a diploma (Beal, 1978).

The test was first administered in the ninth grade. Remedial work for students who failed was provided, followed by retesting with an alternate form of the test twice each year. Parents were notified twice a year on the report card of the standing of their child on each of the four subtests. Summer classes were available for 12th graders who did not successfully complete the tests, and a student who received a certificate of attendance could return at any time to retake a subtest to obtain a diploma (Beal, 1978).
Whether the test helped to raise achievement levels in Denver schools was uncertain. The failure rate of 14% 18 years earlier was reduced to 1.5% by 1978, but data were insufficient to determine if any improvement in achievement could be attributed to the minimum competency test (Beal, 1978).

**Chicago**

Beginning in September, 1977, Chicago students attended classes at their individual competence levels in every subject, rather than in grade levels. At the end of the third, sixth, and eighth grades, students were tested in reading and math, and their achievement scores were compared to the school board's requirements. Special tutoring was provided for those who did not meet minimum requirements. Unless the student performed at a seventh-grade level, he was not allowed to graduate from elementary school. Some Chicago residents claimed that the tests were discriminatory, but the school board members unanimously approved the plan (Shells, 1977a).

**Modesto, California**

In 1976, a new program called "Academic Expectations and the Fourth R: Responsibility," which included a basic skills competency plan for kindergarten through eighth grade and a competency-based high school graduation, was instituted. Students were tested twice a year in each grade level. High school students had to pass a battery of five tests to be eligible for graduation (Enochs, 1978).

Annual assessment, prescribed remedial work, and regular parent conferences were part of both programs. Parents were expected to provide 30 minutes of quiet study time each evening and assure that
assignments were returned by the pupils. An important immediate benefit
was the surge of confidence among the staff that their schools were
standing behind the objectives of the classroom teachers (Enochs, 1978).

Charleston, West Virginia

A steering committee in 1976 decided that all students who met the
Carnegie Unit requirement for high school graduation should receive a
diploma, and that all graduating seniors should receive the same kind of
diploma. However, certificates of competence were awarded to all students
who passed the competency test, indicating which of the specific groups
of competencies were met. Testing was formally done in the third,
sixth, and ninth grades to identify students with academic deficiencies,
and parents were kept informed of the students' deficiencies in math and
reading (Candor-Chandler, 1978).

Gary, Indiana

The Gary program was based on minimum standards not applicable to
students who were mentally handicapped. Students had to pass proficiency
tests in reading and math in 1977. In 1978, written proficiency was
added to the test, and, in 1979, oral proficiency. Checkpoint exams
were given in grades two, five, and seven, with the final test given
initially in the ninth grade. Remedial classes were available for
students needing assistance. Only six seniors did not meet proficiency
requirements on the 1977 test. In 1978, the proficiency level for
reading was raised from 75% to 80%, and the math level was raised from
64% to 75% (Henderson, 1978).
Westside High School, Omaha, Nebraska

Seven competencies were tested at Westside: reading, writing, math, democratic process, problem solving, oral communications, and consumerism. Students who failed the test could review the handbook, take an additional course, or seek remedial help before taking the test again. Students were given as many opportunities as needed to pass the competency test. Tutorial help was available.

In 1977, 765 students graduated and only 8 were affected by minimum competency requirements. Test requirements were not lowered. The students were offered summer school opportunities, and could return to retake the test any time. Problems encountered with the testing program at Westside included management of test data for 2,400 students, apathetic attitudes on behalf of many students about the testing program, and the maintenance of the program itself—revision of test items and alternate forms of the test (Findley, 1978).

Future of Minimum Competency Testing

The future implementation of minimum competency testing was uncertain in 1980. Some educators predicted then that by 1984 most states would have instituted minimum competency testing for their high school graduates (Schab, 1978). However, additional study and deliberation were indicated.

Studies Related to Competency Testing

David Craig (1978) studied the attitudes of administrators in Missouri toward implementing a minimum competency test as one criterion for high school graduation. Respondents favored all high school
graduates meeting some basic minimums, as well as course requirements, for graduation. Fifty-one percent felt that minimum competency testing would improve the quality of education in Missouri.

An analysis of local and state minimum competency standards in New Jersey was completed by Frederick Nadler (1979). Local district personnel displayed a tendency to set higher standards for themselves than did the state. Nadler concluded that statewide minimum competency standards really did represent a minimum level for the achievement of basic skills.

Nancy Raines (1979) compared the perceptions of professional educators and the local school communities in Texas toward minimum competencies needed for graduation. She determined that community resources, in addition to public school programs, should be recruited and organized to provide more student learning opportunities.

Superintendents' perceptions regarding minimum competency testing in Texas were surveyed by William Carnes (1979). Superintendents who responded felt there was a need for minimum competency testing regardless of the size of the school districts they represented, their years of experience, or the amount of education they had. They felt that the local school system should have autonomy, but they reached consensus on 12 components that should be represented by a minimum competency test.

A study was conducted in Illinois by Barbara Battiste (1979) to determine the perceptions of secondary school administrators toward minimum competencies. She reported that agreement was seldom reached on the various aspects of minimum competency determination, which emphasized the controversial nature of the topic. Most schools that were represented in the study utilized paper-and-pencil testing and shared responsibility
for specifying competencies. Respondents indicated that the financial impact of remediation, as well as legal challenges, were major obstacles to the success of their minimum competency programs.

Ralph Blumenthal (1979) studied the development of a consensus model for developing a minimum competency program in California. Through interviews, he concluded that parents were concerned about whether standards for minimum competence would be set high enough for reading, writing, and computation. His recommendation was that further models should be developed after minimal competency testing was actually implemented in the schools, and after the results had been analyzed.

Selected Florida educators, community leaders, and legislators were surveyed by Charles Colman in 1978 to determine the extent to which they agreed on what should constitute minimum basic and functional skills required for secondary school graduation. Respondents accepted the requirement of a minimum competency test for high school graduation, but had concerns about possible harmful effects. Colman recommended a longitudinal study of eighth graders who had been identified for remediation until graduation from high school.

Carol Dean (1980) surveyed 39 state departments of education about their policies for minimum competency testing. Her findings were similar to those of Chris Pipho (1980). She suggested that states considering minimum competency testing programs should monitor the progress made in other states and consider those implications for their decisions.

Policy Statements

Political support for minimum competency testing included the slow process of informing and involving the community in decision making.
However, the persons most threatened by minimum competency testing were members of minorities and teachers (Riegel & Lovell, 1980). Because of this fear, several teacher organizations issued policy statements to encourage proper implementation of minimum competency testing.

The National Education Association (NEA) formulated seven standards by which to measure the competency-based education policies of the states:

1. Policy should provide for many criteria to evaluate student performance, and, in no case, would a written test be the only criterion for grade promotion or high school graduation.

2. Proficiencies to be evaluated should be commensurate with what the local districts considered basic and with the standard of local goals and objectives.

3. Information about students should be collected from teachers, sample work, interviews, self-evaluation, learning contracts completed, and work-study projects.

4. Test items should be developed locally, be diagnostic in nature, and be criterion-referenced. Teachers of various subjects should develop and agree on the exercises in those subjects. The objectives of instruction should be clear to all, and students should have several opportunities to be assessed in a variety of ways. They should be made aware of any deficiencies they might have, and the school should provide remediation.

5. Everyone should be aware that the test exercises had a margin of error.

6. State policy should encourage less emphasis on grade-level designations and grade-level promotions.
7. Local school staffs should receive the kind of assistance they needed to effectively utilize minimum competency testing (Pipho, 1978a).

The American Federation of Teachers (AFT) took the same stance as NEA, according to Edward Fiske (1979). The AFT believed that students should be tested, but opposed using such tests as the sole criterion for any decision regarding a student. They added that teachers needed to teach a balanced curriculum, and should let the parents know what and why they were teaching it through conferences and PTA meetings.

In 1979, the International Reading Association (IRA) Board of Directors issued a policy statement about minimum competency testing as well. The Association advocated multiple indices of student achievement and remediation of deficiencies. They felt that retention and non-promotion should be considered as a last resort (IRA Board of Directors, 1979).

Most educational associations agreed that entirely too much testing took place during a school year, with proof lacking that the tests increased the achievement of students. Many educators called for a moratorium on testing until their use was justified by sound research. However, the cessation of testing was politically not feasible in the late 1970's.

**National Competency Testing**

Minimum competency testing became a federal issue in 1978. Hyman Rickover (1978) claimed before a Senate subcommittee on Education, Arts, and Humanities, that the Department of Education had failed to come to grips with the need in education for proper accountability. He testified that the NEA and other professional educational associations had so much
influence in the Office of Education that the agency could not act objectively and in the public interest. He, therefore, advocated the establishment of national scholastic standards and minimum competency requirements for each grade level with national norms. Parents would then have a means to hold teachers and schools accountable for the quality of their work.

Representative Ronald M. Mottl from Ohio introduced two bills in the House of Representatives concerning minimum competency testing in 1978 (Pipho, 1978a). His legislation required state education agencies to establish a program of basic standards for educational proficiency before they could receive funds under the Elementary and Secondary Education Act. These bills were not passed because of the influence of Joseph Califano (former secretary of the Department of HEW).

Efforts to create a voluntary national competency test were led by Senator S. I. Hayakawa (California). He asked for the creation of a publicly funded corporation to establish standards for student performance. The Senate subcommittee chairman, Claiborne Pell, decided not to push the legislation because the nation's educators were strongly opposed to it (Pipho, 1978a; Warren, 1980).

Criticism of Minimum Competency Testing

Pipho (1979) commented that the basic skills issue affected only a very small number of students, and that a statewide testing program was a heavy-handed measure for the size of the problem. He believed that the movement resulted from political competition between state boards of education and state legislatures to be first to do something to appease public pressures for accountability in education. Legal
challenges were likely to lead to increased court surveillance of schooling and heightened state control of curriculum, he felt.

Many critics believed that minimum competency testing was based on the false assumption that learning could be improved by establishing rigid standards (IRA Board of Directors, 1979; Tyler, 1978). The National Academy of Education Committee on Testing and Basic Skills stated that any setting of state minimum competency standards for awarding the high school diploma was basically unworkable, exceeded the present measurement arts of the teaching profession, and would create more social problems than it could conceivably solve (Tyler, 1978).

Arthur Wise (1978, 1979) declared that minimum competency testing might restore the value of a high school diploma, but that it could not make better teachers of those who could not teach. He added that the schools would be pushed to reduce their aspirations for education and to pursue only those goals that were measurable. Instead of certifying incompetence, schools should help bolster the role of the teacher to improve education, upgrade the staff, provide in-service, and utilize research to learn why a minority of teachers did not teach well and why a minority of students did not learn.

Agreement was voiced by McKenna (1979). He could cite no evidence that Denver students who passed competency tests for graduation were more proficient in life survival skills than those who received diplomas from high schools that did not require such tests. If a school required demonstration of minimum competence, students should be assured that if they submitted themselves to the instructional strategies, they would acquire the competencies. Was anyone in education positive that a
particular instructional strategy would result in the acquisition of a specific competency?

John Sandberg (1979) and Robert Cole (1979) maintained that educators could not be certain they had taught students what they needed to know to be successful in the adult world. They felt that those competencies had not been identified that would prepare a student for society as it would exist ten years hence. Glass (1978a) regarded the testing movement as a misguided philosophy of education, and denied the existence of minimal levels of competence that were barely sufficient for success.

The IRA Board of Directors (1979) listed several criticisms of minimum competency testing. First, dependence on the results of a single test would dictate a narrowing of school curricula. Second, teachers would emphasize student drills to improve performance. Third, paper-and-pencil tests could not validly assess important objectives of a curriculum. Fourth, the test could be culturally biased and therefore invalid for some. Fifth, a variety of assessment measures was needed for graduation requirements, rather than a sole criterion.

Other criticisms were that the test could be racially discriminatory (Washington, 1979), that the test might accidentally misclassify a student as incompetent (Tyler, 1978), that the testing program treated the symptoms of decreasing achievement rather than the causes (Cole, 1979), that hastily developed tests resulted in more confusion (Spofford, 1978), and that failure on the test could lead to a diminished student self-concept and reduced job or life opportunities (Lloyd, 1980).

Mecklenburger (1978) declared that it was nearly impossible to defend minimum competency testing because of numerous theoretical and philosophical considerations that were not dealt with satisfactorily in
areas where competency testing was legislated. He compared the testing movement to the performance contracting movement which began around 1970 and then disappeared from the educational arena in less than ten years.

**Benefits of Minimum Competency Testing**

Arguing against measuring competencies was difficult if that implied good use of public funds, maintaining proficiency standards, and good teaching. Competency-based evaluation could have a beneficial impact if it kept all the goals of the school in sight. Robert Ebel (1978) and Beard (1979) felt that failure could not be abolished by refusal to recognize it. They added that minimum competency testing could restore a concern for the cognitive development of youth to the highest priority in education, motivate teachers to teach more purposefully, and motivate students to work harder to learn.

The IRA Board of Directors (1979) reported that testing could help restore public faith in the quality of education, provide reasonable goals for students and teachers, and generally enhance student learning. If society exercised the right to expect minimum competence from certain occupational groups, why should it not expect minimum competence from high school graduates?

Several examples of successful competency testing programs were available. Jane Ogden (1979) reported that remedial programs in Austin, Texas, had raised the scores of low achievers on the minimum competency test there. Nathan and Jennings (1978a) cited the St. Paul, Minnesota, competency testing program as evidence that the movement could be
positive. The community approved of the new graduation requirements, and follow-up studies of high school graduates indicated that they felt prepared for the world and were succeeding. From Florida, Ralph Turlington (1979) and John Fremer (1978) described an improved atmosphere in the schools where the importance of academic success was stressed.

Jeanne Chall (1979), a noted authority on reading, thought that if the tests were given early enough, were challenging enough, and the results were used as guides for instruction, then they could be constructive. Jimmie Covington (1979) felt that competency testing led to students buckling down and becoming serious about their school work. The state of North Carolina had supplied adequate funding for remedial instruction, including hiring additional teachers and providing more materials, and Covington believed the added expenditure was well-justified.

Warren Newman and Chris Pipho (1979) listed positive aspects of the testing program as the monitoring of the healthy development of students, gaining information in order to use resources effectively, and providing a means for educators to communicate their successes to their political constituents. They did not believe that minimum competency testing resulted in minimum expectations. With the exception of the Florida and California early exit programs, none of the 38 states involved in minimum competency testing had eliminated any Carnegie Units or courses required for high school graduation.

In an attempt to view minimum competency testing in a positive light, Dorothy Seymour (1979) listed several points to consider before disparaging the movement. Her comments were:
1. The failure to achieve could be due in part to the failure of teachers to expect achievement, so a lack of school standards could be partly at fault for low test scores.

2. The lack of student concern was more widespread than the lack of teacher concern.

3. Teachers needed and desired some guides to supplement their own judgment, especially those from respected test publishers.

4. Educators should stop trying to allocate blame and get to work to improve the system.

5. Curricula designed around good tests were better than curricula that were so open-ended as to impose no requirements at all. Good teachers always went beyond the requirements of the tests.

6. Tests should be given all along the way, as well as at the final point.

7. Teacher judgment should be utilized in estimating competence.

Conclusion

The minimum competency testing movement may have reached its high water mark in 1979. Because each state had a set of unique circumstances, minimum competency testing programs were moving in many different directions. The movement had been rapid, with nearly all activity occurring between 1975 and 1980. Research lagged behind until the National Institute of Education (NIE) began a four-year study in 1980 to measure the impact of minimum competency testing programs. It was impossible to predict the long-term influence of the movement on education, because testing had attained the status of law in many states (Riegel & Lovell, 1980).
The major strength of the movement appeared to be its identification of specific learning objectives. Legal and political considerations were likely to prevent any massive denial of high school diplomas based on competency test scores. An unanswered question was whether an emphasis on basic skills and competency testing would provide improved education for marginal and below average students without limiting the variety and depth of instruction for higher achieving students.
Chapter 3

METHODS AND PROCEDURES

The initial step necessary for formulating a sound background for the study was a review of literature related to minimum competency testing. This was accomplished by consulting the Education Index, the Current Index to Journals in Education, Dissertation Abstracts International, and the Charles E. Sherrod Library card catalog at East Tennessee State University. An ERIC computer search was conducted as well.

William Crockett of the Tennessee State Department of Education, Nashville, was then interviewed to determine the implementation status of minimum competency testing in Tennessee in March, 1980.

Three questionnaires were then designed to collect data concerning the attitudes of eighth-grade teachers, their principals, and their superintendents in Tennessee public school systems toward minimum competency testing. Data were analyzed using the Office of Computer Services at East Tennessee State University.

Questions Relevant to the Study

The following questions were considered relevant to the conclusions of the study:

1. Does a significant relationship exist among the attitudes of eighth-grade teachers toward minimum competency testing as indicated by their responses to Items A-Q on the questionnaires?
2. Does a significant relationship exist among the attitudes of their principals toward minimum competency testing on Items A-Q?

3. Does a significant relationship exist among the attitudes of their superintendents toward minimum competency testing on Items A-Q?

4. Does a significant relationship exist between the composite attitudes of eighth-grade teachers and those of their principals on Items A-Q on the questionnaires?

5. Does a significant relationship exist between the composite attitudes of eighth-grade teachers and those of their superintendents on Items A-Q on the questionnaires?

6. Does a significant relationship exist between the composite attitudes of principals and those of superintendents surveyed on Items A-Q on the questionnaires?

Techniques of Analyses

Design of Questionnaires

Three questionnaires (Appendices C-E) were designed to obtain data relevant to this study, one each for eighth-grade teachers in Tennessee, their principals, and their superintendents. Each questionnaire was composed of three sections. Section A asked for system data from superintendents and school data from principals and teachers. Section B, which asked for personal data about the respondents, and Section C, which contained 17 attitudinal questions about minimum competency testing and the 1979 eighth-grade diagnostic basic skills test, were identical on all three questionnaires.

The 17 attitudinal questions (Items A-Q) in Section C required the respondents to read the lead-in statement and then rank the given
responses in the order of priority, highest to lowest, beginning with "1."
The items selected for inclusion in Section C were suggested by the current
literature reviewed in Chapter 2 and by the advanced graduate committee.
The number of responses to each item was not constant because of the
potential for selecting an appropriate answer to a specific question.
Therefore, the number of responses provided ranged from five to nine.

Field Testing

Before the questionnaires were mailed to the school systems selected for inclusion in the study, the survey instruments were field tested in two public school systems in Tennessee. The letter explaining the study to superintendents is included in Appendix F. In addition, the instruments were critiqued by the Advanced Graduate Seminar participants in the spring of 1979 and reviewed by the Institutional Review Board at East Tennessee State University in the fall of 1979. Responses and suggestions from these sources were used to validate the questionnaires and to improve the clarity of the items.

Selection of Systems to be Surveyed

A list of the 148 public school systems in Tennessee was prepared, ranked in descending order from highest to lowest in pupil enrollment using the 1978 Annual Statistical Report of the Department of Education. Thirty-six of these systems, approximately one-fourth of the total number, were selected by stratified random sampling based on pupil enrollment for inclusion in the study. The pupil enrollment categories were suggested by naturally occurring divisions and were designated as follows: A—25,000–150,000; B—11,000–24,999; C—6,000–10,999; D—3,000–5,999; E—1,000–2,999; and F—0–999. Category A contained 6 systems,
Category B contained 6, Category C contained 26, Category D had 44, Category E contained 42, and Category F had 24 systems. These numbers were reduced by approximately one-fourth so that 1 system was selected from Category A, 1 system from Category B, 7 systems from Category C, 11 systems from Category D, 10 systems from Category E, and 6 systems from Category F by using a table of random numbers (Tuckman, 1972, pp. 368-369).

**Distribution of the Questionnaires**

The superintendents of each of the 36 school systems selected for inclusion in the study were mailed a letter (Appendix G) to explain the intent of the study and to ask for their assistance in completing the study. One week later, each of the superintendents was mailed a packet of seven appropriately labeled questionnaires to distribute in the following manner: three to randomly selected eighth-grade teachers who had administered the eighth-grade diagnostic basic skills test in 1979 (a total of 108 teachers), three to their principals (a total of 108 principals), and one to complete himself (a total of 36 superintendents). A letter to reiterate the purpose of the study (Appendix H) was included, as well as return envelopes.

A return of 40% of the questionnaires from each of the three groups of respondents was considered adequate for completion of the study.

**Follow-Up Questionnaires**

One month later, a second packet of questionnaires was mailed to the superintendents of the systems from which no returns had been received. This packet also contained an explanatory letter (Appendix I) and return envelopes.
Categorizing Responses

A total of 100 questionnaires were received by the deadline of April 15, 1980. These questionnaires represented 47% of the superintendents surveyed, 40% of the principals surveyed, and 37% of the teachers surveyed. The committee agreed that analyses of the data should begin, as the combined total of questionnaires represented a 40% return.

The demographic data contained in the first two sections of the questionnaires were assigned numeric designations and entered on computer coding forms under appropriately labeled column numbers. Data were then keypunched on computer cards by the Department of Computer Services at East Tennessee State University. From the computer printout of this information, the data were reported in manually prepared tables as they related to the sub-problems of the study listed in Chapter 1. Data from each of the three groups of respondents were reported separately.

Analyses of Data

A nonparametric statistic was chosen to analyze the relationships among the ordinal level (ranked) data obtained from Items A-Q in the third section of the questionnaires at the .05 level of significance using the two-tailed test for each group of respondents. A nonparametric statistic does not specify conditions about the parameters of the population from which the sample was drawn and does not make an assumption about normality. Kendall's coefficient of concordance ($W$) was used to express the degree of relationship among several rankings of $k$ individuals (Champion, 1970, pp. 224-227; Nunnally, 1975, pp. 293-296; Siegel, 1956,
pp. 229-239) for each item separately for teachers, for each item separately for principals, and for each item separately for superintendents to test Hypotheses 1, 2, and 3.

W equals the ratio between the group sum of squares and the total sum of squares of a complete analysis of variance of the ranks. Data are cast in a k x N table with the rankings (N) listed horizontally across the top of the table (the numbers of the responses that respondents may have chosen for Item A on the questionnaires, for example) and the number of respondents (k) listed vertically on the left side of the table.

The formula for computing the coefficient has three steps (Nunnally, 1975, p. 294):

\[
W = \frac{12S}{k^2(N^3 - N)}
\]

where \( \sum R_j \) = sum of all column totals

N = number of rankings

k = number of respondents

S = sum of deviations squared

Since \( N \) (number of responses to be ranked) was greater than seven and/or \( k \) (number of respondents) was greater than 20 in the majority of cases, the coefficient of concordance was converted to chi-square with \( N-1 \) degrees of freedom using the following formula (Nunnally, 1975, p. 295):
\[ \chi^2 = k (N-1)w \]

The value of \( w \) can range from .00 to 1.00. A \( w \) of .00 means there is no agreement at all among the sets of ranks, and a \( w \) of 1.00 means perfect agreement. Significance is tested by comparing the value of \( w \) associated with \( x^2 \) to the values given in the table for values of the coefficient of concordance for situations where \( k = 3 \) to 20 and \( N = 3 \) to 7. When \( w \) is converted to chi-square, a table of chi-square values with \( N-1 \) degrees of freedom is used to test for significance. If the value of chi-square equals or exceeds the table value for a two-tailed test at the .05 level of significance and a particular value of \( \text{df} = N-1 \), then the null hypothesis that the \( k \) rankings are unrelated may be rejected at that level of significance. It can be concluded that the agreement among \( k \) judges is higher than it would have been by chance.

In cases where respondents failed to rank all the responses provided, the unranked responses were treated as tied ranks and each assigned the average of the ranks they would have been assigned had no ties occurred (Siegel, 1956, pp. 233-234). Since the effect of a large proportion of tied ranks is to depress the value of \( w \), a correction factor was introduced to slightly increase the value of \( w \) over what it would have been if uncorrected. The formula is (Siegel, 1956, p. 234):

\[ T = \frac{\sum (t^3 - t)}{12} \]

Where \( t \) = the number of observations in a group tied for a given rank
\( \sum \) directs one to sum over all groups of ties within any one of the \( k \) rankings

If a respondent completely omitted an item, \( k \) was decreased accordingly.

A computer program was designed in the Office of Computer Services at
East Tennessee State University to perform all the operations discussed above, and a computer printout of the statistical values was obtained after the data from the questionnaires had been keypunched.

The Spearman rank-order correlation ($r_s$), a nonparametric statistic, was used to test Hypotheses 4, 5, and 6 (Popham & Sirotnik, 1967, pp. 280-281; Tuckman, 1972, pp. 244-246). This statistic was selected to assess inter-judge equivalence of judgments over a set of items. A separate analysis was done to compare the attitudes of eighth-grade teachers with the attitudes of their principals for agreement on Item A for the highest priority response, the second highest priority response, and the third highest priority response to test Hypothesis 4. The same procedure was followed for Items B-Q.

The next analysis was performed to compare the attitudes of the teachers with those of their superintendents to test Hypothesis 5. Each of Items A-Q was compared for first, second, and third highest priority responses. Last, the attitudes of the principals toward minimum competency testing were compared with those of their superintendents on Items A-Q for their first, second, and third highest priority responses.

A complete description of one of the nine analyses for Item A may serve to clarify the procedure utilized. A frequency count of all the rankings for each response to Item A for each of the three groups of respondents was provided by a computer printout. From this, the information necessary to complete the Spearman analyses was entered on computer coding forms, and cards were then keypunched.

The data were cast in a $N \times k$ table, with the number of responses given for each item on the vertical side of the table and the number of judges horizontally across the top, as illustrated on the following page:
In the first analysis, the composite number of teachers was listed who ranked each of the nine given responses for Item A as highest priority. Next, the composite number of principals was listed who ranked each of the possible responses as highest priority. Both these columns of numbers were assigned ranks beginning with "1" from the highest frequency to the lowest. The ranks for teachers were "Judge" 1 and the ranks for principals were "Judge" 2. The differences in ranks were then computed to complete the analysis.

The formula for the Spearman rank-order correlation (Tuckman, 1972, p. 245) is:

$$r_s = 1 - \frac{6 \sum d^2}{N^3 - N}$$

where $d$ = the difference between each pair of ranks

$N$ = the number of possible responses

If $N < 30$, the table of critical values of Spearman rho may be consulted to determine significance at the .05 level using the two-tailed test.

The highest $N$ for this study was 9.
The value of $r_s$ ranges from -1.00 to 1.00, with -1.00 indicating perfect negative agreement, 1.00 indicating perfect positive agreement, and a coefficient near zero reflecting little or no relationship. The Statistical Package for the Social Sciences (SPSS) was used by the Department of Computer Services to perform the Spearman rho analyses for this study. The program computed the correction factor for a large proportion of tied rankings before computing the $r_s$ values.

The results of the analyses as they apply to Hypotheses 1-6 are presented in Chapter 4, as well as the report of demographic and personal data.
A randomly selected group of eighth-grade teachers, principals, and superintendents in Tennessee was surveyed to determine their attitudes toward minimum competency testing. Demographic data concerning school systems and personal data about the respondents were also collected. These data were keypunched into IBM 80-column cards and read into the IBM 370/135 memory bank operating under the DOS/VS system at the East Tennessee State University Computer Center. The ranked attitudinal data were analyzed by the Statistical Package for the Social Sciences (SPSS) to compute the Spearman rank-order correlation ($r_s$) and by an original program to compute the Kendall's coefficient of concordance ($W$).

One hundred responses to the questionnaires were received prior to the deadline of April 15, 1980: 17 from superintendents, 43 from principals, and 40 from teachers. The 14 additional responses received after the cut-off date were not included in the study. Responses were received from 27 county school systems and one city school system across the state. Approximately 8,000 eighth-grade graduates of 1979 were represented by respondents to the questionnaires.

**Demographic Data.**

Data indicating the geographic location of the schools, the predominant economic status of the families of the students, and the percentage of minority students enrolled are presented in Table 2.
Table 2
Location, Economic Status, and Percentage of Minority Students

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Group</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Superintendents</td>
<td>Principals</td>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$N=17$</td>
<td>$N=43$</td>
<td>$N=40$</td>
<td></td>
</tr>
<tr>
<td>Location of School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System or School:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>12</td>
<td>19</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Small town</td>
<td>2</td>
<td>14</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>0</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Inner-City</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Evenly distributed</td>
<td>3</td>
<td>0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Economic Status of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Families of Students:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Class</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Middle Class</td>
<td>11</td>
<td>22</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Lower Class</td>
<td>6</td>
<td>18</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Percentage of Minority</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students in System or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 10%</td>
<td>7</td>
<td>19</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>11 - 25%</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>26 - 50%</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>51 - 75%</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>76 - 99%</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Note. Almost all minority students were black.
A majority of superintendents reported that their systems were located in rural areas and were composed of middle-class children. The percentage of minority students most often reported was 1-10%, while there were no superintendents representing metropolitan or inner-city locations, upper-class children, or minority student populations of 76-99%.

Principals represented rural and small town schools with middle- and lower-class students. Most of their schools had minority enrollments of 1-10%. However, eight principals listed minority populations from 26-99%. Teachers represented only middle- and lower-class students, and a majority of them reported minority enrollments between 1-10%. All the respondents indicated that almost all minority students were black.

Responses to the general questions asked on the questionnaires are presented in Table 3. Only three of the 100 respondents indicated that failure on the 1979 eighth-grade diagnostic basic skills test was a criterion for retaining students. Ninety of the educators surveyed did not participate in the development of the test questions. A large majority of the respondents said that their school system planned to remediate deficiencies found through testing, and 47% of the superintendents felt there would be no added cost to their school systems. Those who indicated that costs would increase believed that local funds would have to be secured.

Only five respondents believed the test was racially discriminatory, and 67% of the respondents said that teachers should not have a copy of the test until the actual testing period. Three-fourths of the principals and teachers surveyed felt that the test adequately measured the objectives of their schools.
Table 3
Analysis of General Responses Regarding Minimum Competency Testing

<table>
<thead>
<tr>
<th>General Questions</th>
<th>Superintendents N=17</th>
<th>Principals N=43</th>
<th>Teachers N=40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the 1979 eighth-grade test used as a criterion for retaining any students?</td>
<td>0 Yes 16 No</td>
<td>1 Yes 41 No</td>
<td>2 Yes 38 No</td>
</tr>
<tr>
<td>Did you participate in the development of test items?</td>
<td>3 Yes 13 No</td>
<td>4 Yes 39 No</td>
<td>2 Yes 38 No</td>
</tr>
<tr>
<td>Does your system plan to remediate deficiencies?</td>
<td>14 Yes 1 No</td>
<td>32 Yes 6 No</td>
<td>26 Yes 9 No</td>
</tr>
<tr>
<td>Will there be added cost for the system?</td>
<td>7 Yes 8 No</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Do you feel the test is racially discriminatory?</td>
<td>1 Yes 16 No</td>
<td>3 Yes 39 No</td>
<td>2 Yes 34 No</td>
</tr>
<tr>
<td>Should teachers have a copy of the test at the beginning of the school year?</td>
<td>4 Yes 13 No</td>
<td>16 Yes 27 No</td>
<td>13 Yes 27 No</td>
</tr>
<tr>
<td>Did the test measure the objectives of your school?</td>
<td>- - - -</td>
<td>33 Yes 9 No</td>
<td>26 Yes 9 No</td>
</tr>
</tbody>
</table>
Tables 4, 5, and 6 contain data relating to the procedures employed in administering the 1979 basic skills test. Most teachers and principals indicated that they allotted two days to administer the test, and some teachers reported that an unlimited amount of time was allowed for students to complete each section of the test. (About half of the principals did not respond to the question concerning timing of the test.) Principals and teachers reported that breaks were given between sections of the test, that talking was not permitted, and that, for the majority, the testing area was free from distractions.

Responses pertaining to frequency of test revision and agencies responsible for test revision are listed in Tables 7 and 8. Superintendents most often selected every three years as the time the tests should be revised. The majority of principals were evenly divided between every year and every two years for revision, and teachers most often selected every year as their choice for frequency of revision. The response chosen most often across all groups was "every year."

Agencies or groups responsible for test revision were: teachers; principals; local, state, and federal education agencies; or others (including combinations of the first five). Superintendents most often chose "other" (combinations) to be responsible for revising the test, as did principals. By a very small margin, teachers felt that they should be responsible, with combinations of agencies their second choice. Across all groups, "other" was the most frequent response, "teachers" the second most chosen response, and the "state" education agency the third.

Data indicating the percentages of students who passed all sections of the eighth-grade test, as well as percentages of students who passed
### Table 4

**Number of Days Allowed for Taking Test**

<table>
<thead>
<tr>
<th>Group</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Principals (N=35)</td>
<td>5</td>
</tr>
<tr>
<td>Teachers (N=35)</td>
<td>4</td>
</tr>
<tr>
<td>Total (N=70)</td>
<td>9</td>
</tr>
</tbody>
</table>

### Table 5

**Number of Hours to Complete Each Section of the Test**

<table>
<thead>
<tr>
<th>Group</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2</td>
</tr>
<tr>
<td>Principals (N=25)</td>
<td>1</td>
</tr>
<tr>
<td>Teachers (N=31)</td>
<td>0</td>
</tr>
<tr>
<td>Total (N=56)</td>
<td>1</td>
</tr>
</tbody>
</table>
### Table 6

**General Testing Procedures**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Group</th>
<th>Principals</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were breaks given between the sections of the test?</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>2</td>
</tr>
<tr>
<td>Was talking permitted during the test?</td>
<td></td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>Was the testing area free from distractions?</td>
<td></td>
<td>34</td>
<td>7</td>
</tr>
</tbody>
</table>

### Table 7

**Suggested Frequency for Revision of the Eighth-Grade Test**

<table>
<thead>
<tr>
<th>Group</th>
<th>Years</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Other</td>
</tr>
<tr>
<td>Superintendents (N=17)</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Principals (N=43)</td>
<td>15</td>
<td>15</td>
<td>9</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Teachers (N=39)</td>
<td>16</td>
<td>12</td>
<td>3</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Total (N=99)</td>
<td>35</td>
<td>30</td>
<td>17</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 8

Suggested Agencies for Test Revision Responsibility

<table>
<thead>
<tr>
<th>Agency</th>
<th>Superintendents (N=17)</th>
<th>Principals (N=42)</th>
<th>Teachers (N=40)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>2</td>
<td>8</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Principals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Local Education Agency</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>State Education Agency</td>
<td>2</td>
<td>11</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Federal Education Agency</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other (Combinations)</td>
<td>12</td>
<td>22</td>
<td>14</td>
<td>48</td>
</tr>
</tbody>
</table>
each section, are displayed in Appendix J. Very few respondents indicated the percentages of minority students who passed the entire test or each section, so these percentages were not reported.

**Personal Data**

The age distribution of the respondents is found in Table 9. Over half the superintendents who returned questionnaires were in the 36-49 age category. More of the principals were in that age range as well, but the majority of teachers were in the 20-35 age group. Overall, more respondents were between 36 and 49 years of age.

Table 10 contains information about the professional certification of the respondents, and Table 11 shows the number of years of experience they had in each of the certification classifications. The majority of superintendents were certificated in administration and teaching and had had 7-15 years experience as an administrator, little experience as a supervisor, and 7-15 years experience as a teacher.

Principals were certificated in administration in almost all cases, with teaching certification over 50% of the time and supervision 50% of the time. They had 1-6 years of administrative experience, little supervisory experience, and 7-15 years of teaching experience. Teachers who responded to the questionnaires were certificated in teaching only in almost all instances, with little experience in administration or supervision and 7-15 years experience in teaching.

The highest educational level attained by each respondent is shown in Table 12. Of the 17 superintendents who responded, 35% held a Master's degree, 20% a Master's degree + 15 hours, 6% a Master's degree + 30 hours, and 12% each a Specialist's degree and a Doctor's degree.
### Table 9

**Age Distribution of Respondents**

<table>
<thead>
<tr>
<th>Group</th>
<th>20-35</th>
<th>36-49</th>
<th>50-60</th>
<th>Over 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendents</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Principals</td>
<td>14</td>
<td>20</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Teachers</td>
<td>22</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total (N=97)</td>
<td>39</td>
<td>41</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

### Table 10

**Certification Status of Respondents**

<table>
<thead>
<tr>
<th>Group</th>
<th>Administration</th>
<th>Supervision</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendents</td>
<td>16</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Principals</td>
<td>40</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Teachers</td>
<td>1</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>33</td>
<td>81</td>
</tr>
</tbody>
</table>
Table 11

Number of Years Experience in Each Certification Category

<table>
<thead>
<tr>
<th>Group</th>
<th>Administration</th>
<th>Supervision</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1-6</td>
<td>7-16</td>
</tr>
<tr>
<td>Superintendents (N=17)</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Principals (N=42)</td>
<td>0</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Teachers (N=40)</td>
<td>37</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total (N=99)</td>
<td>39</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Group</td>
<td>BA</td>
<td>BS</td>
<td>MA</td>
</tr>
<tr>
<td>----------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Superintendents (N=17)</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Principals (N=42)</td>
<td>1</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Teachers (N=40)</td>
<td>28</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Total (N=99)</td>
<td>29</td>
<td>25</td>
<td>12</td>
</tr>
</tbody>
</table>
Two percent of the principals held Bachelor's degrees, 30% held Master's degrees, 52% had attained hours beyond the Master's, 9% held Specialist's degrees, and 5% had earned doctorates. Of the teachers who responded, all had attained Bachelor's degrees, while 15% held a Master's degree, 13% had completed hours beyond the Master's degree, and 3% had earned an Educational Specialist's degree.

**Analyses of Findings**

Six null hypotheses were tested in the study. All the hypotheses were tested for significant relationships at the .05 level using a two-tailed test.

Hypothesis 1: There will be no significant relationship among the attitudes of eighth-grade teachers toward minimum competency testing.

The values of Kendall's coefficient of concordance (W) and chi-square (X²) for teachers for Items A-Q on the questionnaires are shown in Table 13. In almost all cases, N > 7 or k > 20, so all W values were converted to chi-square values. An examination of the chi-square values in Table 13 disclosed that significant relationship existed among the attitudes of teachers at the .01 level for Item L and the .001 level for Items A, B, C, D, E, F, G, H, I, J, K, M, N, O, P, and Q. Therefore, the first null hypothesis was rejected for Items A-Q, and the research hypothesis was accepted.

From the Kendall's matrix for each item, the three responses having the lowest column totals were determined. Since the higher ranked responses (1, 2, and 3) have the lower numerical values, the column totals for the higher ranked responses will be lower than the column totals for responses ranked 7, 8, and 9. Consequently, the
Table 13
Kendall's Coefficient of Concordance (W) Values and Chi-Square ($X^2$) Values for the Comparison of Attitudes Among Teachers

<table>
<thead>
<tr>
<th>Item</th>
<th>Value of W</th>
<th>df=N-1</th>
<th>$X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item A</td>
<td>.641</td>
<td>8</td>
<td>196.850**</td>
</tr>
<tr>
<td>Item B</td>
<td>.310</td>
<td>5</td>
<td>58.175**</td>
</tr>
<tr>
<td>Item C</td>
<td>.563</td>
<td>5</td>
<td>106.332**</td>
</tr>
<tr>
<td>Item D</td>
<td>.270</td>
<td>8</td>
<td>73.917**</td>
</tr>
<tr>
<td>Item E</td>
<td>.587</td>
<td>5</td>
<td>102.435**</td>
</tr>
<tr>
<td>Item F</td>
<td>.316</td>
<td>7</td>
<td>65.606**</td>
</tr>
<tr>
<td>Item G</td>
<td>.633</td>
<td>6</td>
<td>117.209**</td>
</tr>
<tr>
<td>Item H</td>
<td>.200</td>
<td>5</td>
<td>32.048**</td>
</tr>
<tr>
<td>Item I</td>
<td>.479</td>
<td>6</td>
<td>89.445**</td>
</tr>
<tr>
<td>Item J</td>
<td>.746</td>
<td>4</td>
<td>51.160**</td>
</tr>
<tr>
<td>Item K</td>
<td>.159</td>
<td>8</td>
<td>44.813**</td>
</tr>
<tr>
<td>Item L</td>
<td>.099</td>
<td>6</td>
<td>19.071*</td>
</tr>
<tr>
<td>Item M</td>
<td>.220</td>
<td>6</td>
<td>49.017**</td>
</tr>
<tr>
<td>Item N</td>
<td>.359</td>
<td>6</td>
<td>79.637**</td>
</tr>
<tr>
<td>Item O</td>
<td>.407</td>
<td>8</td>
<td>119.177**</td>
</tr>
<tr>
<td>Item P</td>
<td>.505</td>
<td>5</td>
<td>96.214**</td>
</tr>
<tr>
<td>Item Q</td>
<td>.655</td>
<td>8</td>
<td>198.735**</td>
</tr>
</tbody>
</table>

Note. Two-tailed test.

* $p < .01$
** $p < .001$
column total that is the lowest indicates the response ranked first priority most often. This procedure can be utilized to determine second and third priorities as well. The responses ranked first, second, and third priority for each of the items on the questionnaires (Appendix K) are discussed below.

Teachers chose permissiveness in the family, the general decline of values, and television as the three major causes of the decrease in pupil performance on achievement tests (Item A). They selected reading, mathematics, and language as the basic skills a student needs to be considered minimally competent in Item B, and problem-solving, listening skills, and consumer economics as additional skills needed in Item C. In Item D, teachers selected the state department of education, the state board and state department of education, and then state and local boards of education as the agencies that should determine the level of minimum competence for the state's students. In Item E, teachers felt that minimum competency testing should be used to diagnose deficiencies, determine the need for remediation, and determine promotion from grade to grade.

Item F contained several combinations of grade levels to be assessed by minimum competency tests. Teachers chose as their first priority the plan to test students at the end of grades 3, 6, 9, and 12. Continuous testing at the end of grades K-12 was chosen second, and testing at the end of grades 8 and 11 was ranked third. If teachers felt that too many students failed the test, they believed that (1) the objectives of the test should be reviewed to determine whether they matched the objectives of the school, (2) the school should remediate
deficiencies and then retest, or (3) different passing scores should be set for exceptional children (Item G).

The kinds of tests selected to measure minimum competency in Item H were criterion-referenced tests, standardized tests, or multiple-choice tests developed locally. It was believed that teachers working as a statewide committee, state boards of education with the state department of education, and local boards of education with the aid of local teachers should develop the tests (Item I).

Fifteen of the teachers who responded to the questionnaires felt that no student should be exempted from taking a minimum competency test. The remainder of the teachers surveyed indicated that a child should be exempted from taking the test if he was mentally handicapped, physically handicapped, or economically deprived (Item J).

Items K-Q on the questionnaires pertained to methods that educators, parents, and students could utilize to increase student achievement. From the responses received, teachers felt that the school system should provide the necessary materials and staff to provide more individualized instruction, revise the curricula to meet the objectives of the test, and revise the test to match the objectives of the school (Item K). They further indicated that school board members should provide larger teacher salaries, hire more paraprofessionals to relieve classroom teachers, and hire more instructional aides (Item L). In Item M, teachers believed that the school superintendent should lower the pupil-teacher ratio, hire effective teachers even if greater expense was incurred, and hire additional teachers to provide remedial help.
This group of educators further recommended that principals should maintain constant communication with teachers, students, and parents about pupil deficiencies, make certain that teachers have adequate supplies, and place more emphasis on academics and less on athletics (Item N). Teachers indicated that they should develop relevant courses of study and objectives, spend more time reviewing basic skills each day, and become more involved in the selection of instructional materials (Item O).

In Item P, teachers felt that parents should supervise the homework of students, give more verbal support and encouragement to the students, and reduce the amount of time students spend watching television. They also indicated that students should develop good study habits, develop a serious attitude toward learning, and allot a certain amount of time each night for study (Item Q).

Hypothesis 2: There will be no significant relationship among the attitudes toward minimum competency testing of principals who supervise eighth-grade teachers.

Table 14 contains the values of $W$ and $X^2$ for Items A-Q on the questionnaires as determined from the responses of principals. A significant relationship at the .05 level was found for Item H and at the .001 level for Items A, B, C, D, E, F, G, I, J, K, L, M, N, O, P, and Q. The null hypothesis was rejected for all items, and the research hypothesis was accepted.

The three responses for Item A having the lowest column totals for principals (Appendix K) were permissiveness in the family, a general decline of values, and television. They indicated that these factors had contributed greatly to the decline in pupil performance on achievement tests in
Table 14

Kendall's Coefficient of Concordance (W) Values and Chi-Square ($X^2$) Values for the Comparison of Attitudes Among Principals

<table>
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<tr>
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<td>85.299**</td>
</tr>
<tr>
<td>C</td>
<td>.551</td>
<td>5</td>
<td>112.342**</td>
</tr>
<tr>
<td>D</td>
<td>.457</td>
<td>8</td>
<td>145.882**</td>
</tr>
<tr>
<td>E</td>
<td>.637</td>
<td>5</td>
<td>114.432**</td>
</tr>
<tr>
<td>F</td>
<td>.334</td>
<td>7</td>
<td>70.413**</td>
</tr>
<tr>
<td>G</td>
<td>.616</td>
<td>6</td>
<td>123.179**</td>
</tr>
<tr>
<td>H</td>
<td>.077</td>
<td>5</td>
<td>11.824*</td>
</tr>
<tr>
<td>I</td>
<td>.426</td>
<td>6</td>
<td>82.571**</td>
</tr>
<tr>
<td>J</td>
<td>.756</td>
<td>4</td>
<td>68.465**</td>
</tr>
<tr>
<td>K</td>
<td>.249</td>
<td>8</td>
<td>72.552**</td>
</tr>
<tr>
<td>L</td>
<td>.122</td>
<td>6</td>
<td>25.462**</td>
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<td>M</td>
<td>.301</td>
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</tr>
<tr>
<td>O</td>
<td>.419</td>
<td>8</td>
<td>123.998**</td>
</tr>
<tr>
<td>P</td>
<td>.478</td>
<td>5</td>
<td>96.010**</td>
</tr>
<tr>
<td>Q</td>
<td>.581</td>
<td>8</td>
<td>181.636**</td>
</tr>
</tbody>
</table>

Note. Two-tailed test.

* $p < .05$
** $p < .001$
the same order as did teachers. Reading, mathematics, and composition were selected as basic skills in Item B, and problem-solving, listening skills, and consumer economics were ranked first, second, and third by the principals as additional skills needed for minimum competence (Item C).

Principals ranked state and local boards of education as the agencies that should have primary responsibility for determining the level of minimum competence for the students of the state. They ranked the state board of education and the state department of education as second, and the state department of education alone as third choice in Item D. They further indicated that minimum competency testing should be used to diagnose deficiencies, to determine remediation needs, and to determine promotion from grade to grade (Item E).

In Item F, principals indicated that their first choice for grade levels to be assessed by minimum competency tests was the plan to test at the end of grades 3, 6, 9, and 12. They ranked testing at the end of grades 8 and 11 as their second plan and testing at the end of each grade (K-12) as their third plan. If principals felt that too many students failed the tests (Item G), they believed that the objectives of the test should be reviewed, deficiencies should be remediated and the student retested, and different passing scores should be established for exceptional children.

The three kinds of tests to measure minimum competence that principals ranked first, second, and third were standardized tests, criterion-referenced tests, and multiple-choice tests developed locally. They felt that teachers working as a statewide committee should develop the test. Their second choice of an agency to develop the test was the
state board of education with the state department of education, and their third choice was the local board of education with the aid of local teachers.

Of the principals surveyed, nine indicated that no child should be exempted from taking the minimum competency test. The principals who responded to Item J felt that a mental handicap, a physical handicap, or economic deprivation was a valid reason for exempting a child from taking the test.

Principals felt that more individualized instruction, greater per pupil expenditure, and additional materials for classroom use were conducive to greater student achievement (Item K). They recommended that the school board should hire more instructional aides, hire more paraprofessionals to relieve regular teachers, and provide larger teacher salaries to improve student achievement (Item L). In Item M, principals listed the three primary activities that superintendents should stress. They were: hiring effective teachers even if they required higher salaries, lowering the pupil-teacher ratio, and hiring additional teachers to provide remedial assistance to students.

In Item N, principals felt that they should maintain constant communication with teachers, students, and parents about pupil deficiencies, make certain that teachers have adequate supplies, and place more emphasis on academics and less on athletics. They felt that teachers should spend more time reviewing the basic skills each day, develop relevant courses of study and objectives, and become more involved in the selection of instructional materials (Item O).
The activities that principals recommended for parents to improve student achievement were: supervision of homework, more verbal support and encouragement, and the reduction of time spent watching television (Item P). Principals also reported that they felt students could improve their achievement by developing good study habits, developing a serious attitude toward learning, and allotting a certain amount of time each night for study (Item Q).

Hypothesis 3: There will be no significant relationship among the attitudes of superintendents toward minimum competency testing.

The values of W and $X^2$ for Items A-Q on the questionnaires for superintendents are displayed in Table 15. The value of 8.276 for Item H was not significant at the .05 level. Therefore, the null hypothesis was not rejected. However, significant relationship was found for Item L and Item M at the .05 level; for Item F at the .01 level; and for Items A, B, C, D, E, G, I, J, K, N, O, P, and Q at the .001 level.

Examination of the lowest column totals for Item A (Appendix K) revealed that superintendents ranked television as the primary reason for the decline in pupil performance on achievement tests. Permissiveness in the family was ranked second, and a general decline of values was third. They selected reading, mathematics, and language as the three most important basic skills (Item B), and problem-solving, listening skills, and consumer economics as additional skills needed for minimum competence (Item C).

In Item D, superintendents indicated that the local board of education should be the primary agency for determining the level of minimum competence for students. Their second choice was the state
Table 15

Kendall's Coefficient of Concordance (W) Values and Chi-Square ($X^2$) Values for the Comparison of Attitudes Among Superintendents

<table>
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<th>$X^2$</th>
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<td>27.160***</td>
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<tr>
<td>Item C</td>
<td>.508</td>
<td>5</td>
<td>41.269***</td>
</tr>
<tr>
<td>Item D</td>
<td>.440</td>
<td>8</td>
<td>45.916***</td>
</tr>
<tr>
<td>Item E</td>
<td>.525</td>
<td>5</td>
<td>38.958***</td>
</tr>
<tr>
<td>Item F</td>
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</tr>
<tr>
<td>Item G</td>
<td>.726</td>
<td>6</td>
<td>53.061***</td>
</tr>
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<td>Item H</td>
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<td>5</td>
<td>8.276</td>
</tr>
<tr>
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<td>.499</td>
<td>6</td>
<td>38.055***</td>
</tr>
<tr>
<td>Item J</td>
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<td>4</td>
<td>25.200***</td>
</tr>
<tr>
<td>Item K</td>
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<td>8</td>
<td>31.996***</td>
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<td>16.645*</td>
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<td>Item P</td>
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</tr>
<tr>
<td>Item Q</td>
<td>.706</td>
<td>8</td>
<td>84.455***</td>
</tr>
</tbody>
</table>

Note. Two-tailed test.

* $p < .05$
** $p < .01$
*** $p < .001$
department of education, and their third choice was the state and local boards of education. They selected diagnosis of deficiencies, determining the need for remediation, and graduation from high school as the three major purposes of a minimum competency testing program (Item E).

Superintendents reported that minimum competency tests should be used to assess pupil performance at the end of grades 3, 6, 9, and 12. Testing at the end of grades K-12 was the second most chosen plan, while testing at the end of grades 8 and 11 was the third choice. If superintendents felt that too many students had failed the competency test (Item G), they recommended that the objectives of the test be reviewed for congruency with the objectives of the school, deficiencies be remediated and the students retested, and different passing scores be set for exceptional children.

In Item H, the first, second, and third choices of superintendents for the kind of test that should be used to measure minimum competence were criterion-referenced tests, standardized tests, and multiple-choice tests developed locally. The agency that they felt should develop the test was a statewide committee of teachers first, the state board of education with the state department of education second, and the local board of education with the aid of local teachers third (Item I).

Of the 17 superintendents surveyed, five felt that no child should be exempted from taking a minimum competency test (Item J). The remaining respondents listed a mental handicap, a physical handicap, and economic or cultural deprivation as reasons for exempting a student.

Superintendents indicated that the school system should provide funds for more individualized instruction, increase the per pupil
expenditure, and revise the curricula to meet the objectives of the test to improve student achievement (Item K). They added that school board members could further increase performance of students by hiring more effective teachers, lowering the pupil-teacher ratio, and hiring additional teachers to provide remedial assistance (Item M).

Additional recommendations by superintendents were that principals should maintain constant communication with teachers, students, and parents about pupil deficiencies, make certain that teachers have adequate supplies, and place more emphasis on academics and less on athletics (Item N). They added that teachers should develop relevant courses of study and objectives, spend more time reviewing basic skills each day, and become more involved in the selection of instructional materials to help increase student achievement (Item O).

In Item P, superintendents ranked verbal support and encouragement as the most important means by which parents could help students raise their achievement scores. Providing more reading material in the home was ranked second and supervision of homework third. Superintendents felt that students could improve their own performance on tests by developing good study habits, allotting a certain amount of time each night for study, and developing a serious attitude toward learning.

Appendix K contains the identification numbers of the responses to each item that were ranked first, second, and third by superintendents, principals, and teachers.

Hypothesis 4: There will be no significant relationship in the attitudes of eighth-grade teachers and their principals toward minimum competency testing.
The Spearman rank-order correlation ($r_s$) values resulting from the comparison of the attitudes of teachers and principals on Items A-Q on the questionnaires are contained in Table 16. First priority, second priority, and third priority comparisons are shown. Although the null hypothesis could not be rejected overall, the findings did indicate a significant relationship at the .05 level for the first priority responses for Items B, C, E, H, I, and L; at the .01 level for Items A, D, G, K, O, P, and Q; and at the .001 level for Items F and J.

The comparisons of second priority responses revealed significant relationship at the .05 level for Items C, G, O, P, and Q; at the .01 level for Items D, E, F, I, and K; and at the .001 level for Items A and M. Items B, H, J, L, and N showed no significant relationship.

Values for third priority responses were significant at the .05 level for Items C and O; at the .01 level for Items A, G, I, and Q; and at the .001 level for Items M and P. No significant relationship was found for Items B, D, E, F, H, J, K, L, or N.

Hypothesis 5: There will be no significant relationship in the attitudes of eighth-grade teachers and their superintendents toward minimum competency testing.

The Spearman rank-order correlation values for the comparison of the responses of teachers and superintendents on Items A-Q on the questionnaires are displayed in Table 17. First, second, and third priorities were compared separately. The null hypothesis could not be rejected overall. However, for first priority responses, significant relationship was noted for Items E, F, G, and K at the .05 level; for
Table 16  
Spearman Rank-Order Correlation ($r_s$) Values for the Comparison of Priorities of Principals and Teachers

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
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<th>Third Priority</th>
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<td>.9192***</td>
<td>.8376**</td>
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<tr>
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<td>.6983</td>
<td>.2319</td>
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<td>.8407*</td>
<td>.8332*</td>
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<td>.8644**</td>
<td>.5457</td>
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<td>.3479</td>
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<td>F</td>
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<td>.7962*</td>
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<td>.8818**</td>
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<td>.5263</td>
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Note. Two-tailed test.

*p < .05
**p < .01
***p < .001
Table 17
Spearman Rank-Order Correlation ($r_s$) Values for the Comparison of Priorities of Superintendents and Teachers

<table>
<thead>
<tr>
<th>Item</th>
<th>$N$</th>
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<th>Second Priority</th>
<th>Third Priority</th>
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Note. Two-tailed test.

$^*_{p} < .05$

$^{**}_{p} < .01$

$^{***}_{p} < .001$
Items A, B, C, N, O, and P at the .01 level; and for Item Q at the .001 level.

Significant relationship was found at the .05 level for second priority responses for Items A, G, I, and P; and at the .01 level for Items C, M, O, and Q. No relationship was reported for Items B, D, E, F, H, J, K, L, or N.

The comparison of third priority responses resulted in significant relationship at the .05 level for Items D, G, and I; and at the .01 level for Items B and Q. Comparison of responses to the remaining items yielded no significant relationship.

Hypothesis 6: There will be no significant relationship in the attitudes of superintendents and principals who supervise eighth-grade teachers toward minimum competency testing.

Table 18 contains Spearman rank-order correlation values for the comparisons of the first, second, and third priorities of principals and superintendents on Items A-Q of the questionnaires. Since no significant relationship was found for Items A, C, D, J, L, M, or N, the null hypothesis was not rejected. On the other hand, analysis of first priority responses revealed significant relationship for Items E, F, and O at the .05 level; at the .01 level for Items B, G, and H; and at the .001 level for Items I, K, P, and Q.

Significant relationship was noted between second priority responses for Items G, I, M, and O at the .05 level. At the .01 level, significance was found for Items A, C, and Q. Correlation values were significant at the .05 level for third priority responses for Items E, G, I, J, and P; and at the .01 level for Item Q.
Table 18
Spearman Rank-Order Correlation ($r_s$) Values for the Comparison of Priorities of Superintendents and Principals

<table>
<thead>
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<td>Item K</td>
<td>9</td>
<td>.9082***</td>
<td>.6114</td>
<td>-.2339</td>
</tr>
<tr>
<td>Item L</td>
<td>7</td>
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<td>.0804</td>
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<td>Item M</td>
<td>7</td>
<td>.4001</td>
<td>.7872*</td>
<td>.1698</td>
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<tr>
<td>Item N</td>
<td>7</td>
<td>.6765</td>
<td>.5819</td>
<td>.2433</td>
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<tr>
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<td>9</td>
<td>.7813*</td>
<td>.6886*</td>
<td>.2815</td>
</tr>
<tr>
<td>Item P</td>
<td>6</td>
<td>.9710***</td>
<td>.5294</td>
<td>.8210*</td>
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<tr>
<td>Item Q</td>
<td>9</td>
<td>.9798***</td>
<td>.8766**</td>
<td>.8733**</td>
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Note. Two-tailed test.

$^{*}p < .05$

$^{**}p < .01$

$^{***}p < .001$
Summary

A stratified random sample of 36 superintendents, 106 principals who supervised eighth-grade teachers, and 108 eighth-grade teachers from public school systems in Tennessee were surveyed to determine if their attitudes toward minimum competency testing were related. The educators included in this study had direct knowledge of the administration of the eighth-grade diagnostic basic skills test in 1979 in their schools or school systems.

Six null hypotheses were formulated to determine the degree of relationship (1) among attitudes of teachers toward minimum competency testing, (2) among attitudes of principals, (3) among attitudes of superintendents, (4) between attitudes of teachers and principals, (5) between attitudes of teachers and superintendents, and (6) between attitudes of principals and superintendents. Hypotheses 1, 2, and 3 were tested by statistically analyzing the ranked data in Items A-Q on the questionnaires with a computer program for Kendall's coefficient of concordance (W), and Hypotheses 4, 5, and 6 were tested with the SPSS Spearman rank-order correlation (r_s) analysis. Both programs adjusted the number of respondents (k) for each item and applied a correction factor for tied rankings. The .05 level of significance with a two-tailed test was selected to test all hypotheses.

Significant relationship was found among the attitudes of teachers at the .05 level for Items A-Q on the questionnaires. Therefore, the first null hypothesis was rejected and the research hypothesis accepted. A significant relationship was also found among the attitudes of principals at the .05 level for all the items, and the second null hypothesis was
rejected. The third null hypothesis was not rejected because the value obtained from the analysis of attitudes among superintendents for Item H was not significant at the .05 level.

Hypothesis 4 was not rejected overall, although the findings indicated a significant relationship at the .05 level for 15 of the 17 items for first priority responses, 12 of the 17 items for second priority responses, and 8 of the 17 items for third priority responses. Hypothesis 5 was not rejected. However, comparison of first priority responses resulted in significant relationship for 11 of the 17 items. Second priority responses were significantly related for 8 of the 17 items, and third priority responses were significantly related for 5 of the 17 items. The sixth null hypothesis was not rejected because 7 of the first priority responses, 10 of the second priority responses, and 11 of the third priority responses were not significantly related at the .05 level.

Principals and teachers exhibited the greatest degree of relationship. They agreed on the first priority for 88% of the items, second priority for 71% of the items, and third priority for 47% of the items. A comparison of the attitudes of teachers and superintendents for all items revealed significant agreement for 65% of first priority responses, 47% of second priority responses, and 29% of third priority responses. When the attitudes of principals were compared with those of superintendents, significant relationship was found for 59% of the items for first priority responses, 41% of the items for second priority responses, and 35% of the items for third priority responses.
No attempt was made to relate these findings with the demographic data or personal data contained in the questionnaires. These data were requested to determine if the respondents represented the total student population of the state.

Analysis of the demographic data revealed that most respondents represented rural or small-town areas with middle- and lower-class students. The percentage of minority students was reported as 1-10% in the majority of responses. Most educators reported that in 1979, minimum competency testing was accomplished in two days with no time limit for each section. Breaks were allowed but talking was not. The testing areas were free from distractions. Respondents felt that the test should be revised yearly through the combined efforts of more than one educational agency.

Most educators had not participated in the development of test items for the 1979 test, but felt that the test adequately measured the objectives of their schools. They did not feel that teachers should have prior knowledge of the test. Respondents reported that performance on the 1979 test was not used as a criterion to fail any eighth-grade students. They felt that their school systems would provide remedial assistance for students who failed the test, but opinions were divided about whether additional funds would be needed by the systems.

Personal data revealed that most respondents were divided between the 20-35 age group and the 36-49 age group. The highest degree held by 29% of the respondents was a Bachelor's degree, and 25% had obtained a Master's degree. The other respondents had attained educational levels divided among the remaining categories in much smaller percentages.
More respondents were certificated in teaching than any other area. Teaching certification was indicated by 81% of the respondents, administrative certification by 57%, and supervisory certification by 33%. Little administrative experience was reported by 29% of the respondents, little supervisory experience by 88%, and little teaching experience by 10%. Administrative experience of 1-15 years was reported by 47% of the respondents and over 15 years by 13%. Supervisory experience of 1-15 years was indicated by 11% of the respondents. Teaching experience of 1-15 years was reported by 76% of the respondents and over 15 years by 13%.

An intent of the study was to compare the percentages of all students who passed the entire test and each section of the test with the percentages of minority students who passed the entire test and each section. However, schools did not maintain records of the performances of minority students, so respondents could not provide this information. Total student performance percentages are reported in Appendix J.

Authors cited in the review of literature suggested that educators should answer certain questions before implementing a minimum competency testing program, and agreement among all levels of educators was recommended. The results of this study only partially substantiated the presence of agreement in the attitudes of educators in Tennessee. Within-group agreement for all three groups was significant for almost 100% of the 17 items on the questionnaires, whereas between-group agreement was significant for fewer items. Principals and teachers significantly agreed on first, second, and third priorities more often than teachers and superintendents, or principals and superintendents.
Comparisons of the attitudes of teachers with superintendents and principals with superintendents yielded similar results.
Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The minimum competency testing movement of the 1970's was probably fueled by pressure from legislators who were responding to the demands of taxpayers. They wanted to increase the accountability of educators for accomplishing specified educational objectives so that a student could survive in the world by the time he graduated from high school. Implementation of a competency testing program became a priority for educational administrators in practically every state.

Statewide minimum competency testing as a requirement for high school graduation began in Florida in 1976. Problems inherent in the program became readily discernible, however, and these problems spawned a debate that had scarcely subsided by 1980. One criticism of the testing was that no agreement existed among educators about which factors constituted minimal competence for survival in the world. Another argument was that the objectives of the test did not reflect what was being taught in the classrooms, and, therefore, the test was not a valid measure of what students could do. Poor test performance by certain groups of students led to charges of discrimination and capricious test construction. Finally, critics contended that the setting of passing scores was necessarily arbitrary and indefensible.

In spite of the negative aspects of minimum competency testing, by 1978 a majority of the states had instituted some form of competency
testing, either through their legislatures or state boards of education. Proponents argued that competency testing would indicate to the public that educators would meet the challenge of accountability for producing certain educational outcomes. They felt that competency testing should not necessarily be a criterion for high school graduation or for promotion from grade to grade, but that it could be used primarily to diagnose deficiencies early in a student's educational life so that these deficiencies could be remediated before high school graduation. In essence, those educators amenable to competency testing felt that espousing some specified educational objectives was more defensible than having none, simply because consensus could not be reached as to what constituted minimal competence.

A competency test was mandated in Tennessee by the State Board of Education for the high school graduating class of 1982. This mandate did not have the status of law in Tennessee and could be amended at any meeting of the board. No plans had been made to change the requirements as of this writing, and the eighth-grade diagnostic basic skills test (a minimum competency test) was administered for the third year in 1980.

The intent of this study was to determine whether public school administrators and eighth-grade teachers in Tennessee displayed agreement in their attitudes toward minimum competency testing.

The systems to be included in the study were randomly chosen from defined enrollment categories. From these systems, 36 superintendents, 108 principals, and 108 teachers were selected to receive questionnaires. A period of six weeks was designated for the return of the questionnaires mailed to the systems, and 100 responses were collected during that period: 17 from superintendents, 43 from principals, and 40 from
teachers. These responses represented a 40\% return of questionnaires, the percentage predetermined to be adequate for the study.

Relationships in attitudes within groups were tested for statistical significance by Kendall's coefficient of concordance, while relationships in attitudes between groups were tested by the Spearman rank-order correlation. The .05 level of significance was applied in all cases using the two-tailed test.

Results of the data analysis indicated that agreement was more often significant within groups than between groups. Within groups, a significant relationship was obtained for all 17 attitudinal items on the questionnaires for teachers and for principals, and for all items except H for superintendents.

For first, second, and third priority responses, teachers and principals displayed greater agreement of rankings on each item than did teachers and superintendents, or principals and superintendents. Teachers and principals agreed on 88\% of the items for their first priority responses, 71\% of the items for their second priority responses, and 47\% of the items for their third most chosen responses. A comparison of the attitudes of teachers and superintendents revealed significant agreement on 65\%, 47\%, and 29\% of the items for first, second, and third priority responses. When attitudes of principals were compared with those of superintendents, significant agreement was obtained for 59\% of the items for first priority responses, 41\% of the items for second priority responses, and 35\% of the items for third priority responses. Analysis of rankings beyond third priority responses was not conducted due to the great number of tied rankings beyond the third ranking.
Analysis of the demographic data revealed that most respondents represented students in categories other than urban and upper class, and the schools contained a small percentage of minority students. Answers to the general questions about minimum competency testing and about the administration procedures for the 1979 basic skills test given to eighth-graders were very similar.

Most respondents were between the ages of 20 and 49, and 71% had attained a Master's degree or more. Teaching certification was indicated by 81% of the respondents, and teaching experience of 1-15 years was reported by 76% of the respondents. Administrative certification was held by 57% of the respondents, and 47% of them had 1-15 years of administrative experience.

**Conclusions**

As a result of the study, the following conclusions were made concerning the first, second, and third priority attitudes of eighth-grade teachers, their principals, and their superintendents toward minimum competency testing:

1. Television, permissiveness in the family, and a general decline of values were believed to have contributed to a decrease in pupil performance on achievement tests.

2. Reading, mathematics, writing, and language were selected as basic skills needed to be minimally competent.

3. Problem-solving ability, listening skills, and consumer economics were chosen as additional skills needed to be considered minimally competent.
4. Agencies responsible for determining the level of minimum competence for the students should be either local boards of education, the state department of education, state and local boards of education, or the state board and state department of education.

5. Minimum competency testing should be used to diagnose deficiencies, determine the need for remediation, promote students from grade to grade, and determine eligibility for high school graduation.

6. The first choice for grade levels to be assessed by a competency test was at the end of grades 3, 6, 9, and 12. The second choice was the plan to test at the end of each grade (K-12), and the third choice was to test at the end of grades 8 and 11.

7. If educators felt that too many students failed a competency test, the objectives of the test should be reviewed to determine if they match the objectives of the school, deficiencies should be remediated followed by retesting, and different passing scores should be set for exceptional children.

8. A standardized test, criterion-referenced test, or multiple-choice test should be employed to measure minimum competence.

9. Tests should be developed by teachers working as a committee statewide, the state board of education with the state department of education, or local boards of education with local teachers for local implementation.

10. The primary reason that a child should be exempted from taking a competency test was a mental handicap. A physical handicap, cultural deprivation, and economic deprivation were less important reasons.

11. The school system could increase student achievement by stressing more individualized instruction, increasing the per pupil expenditure,
revising the curricula to meet the objectives of the test, providing
more materials in the classroom, and frequently revising the test to
match the objectives of the school.

12. A positive influence could be exerted by the school board if
it provided larger teacher salaries, hired more paraprofessionals to
relieve teachers, and hired more instructional aides.

13. The school superintendent should emphasize the hiring of
effective teachers even if costs to the system would be increased,
lowering the pupil-teacher ratio, and hiring additional teachers to
provide remedial help to students.

14. The principal should maintain constant communication with
teachers, students, and parents about pupil deficiencies, make certain
that teachers have adequate supplies, and place more emphasis on academics
than on athletics.

15. Developing relevant courses of study and objectives, reviewing
the basic skills longer each day, and becoming more involved in the
selection of instructional materials were suggested activities for
teachers that would lead to improvement of student achievement.

16. Parents could help students by supervising their homework,
giving more verbal support and encouragement, providing more reading
material in the home, and reducing the time their students spend watching
television.

17. Students could better their academic performance by developing
good study habits, allotting a certain amount of time each night for
study, and developing a serious attitude toward learning.
As a result of the study, the following recommendations were made:

1. Additional studies should be conducted to determine whether student achievement significantly increased after the implementation of a minimum competency testing program in Tennessee.

2. Research should be done to determine the effectiveness of remediation on test performance of pupils after the administration of the first high school proficiency examination in 1981.

3. Additional studies should be done to compare the attitudes of educators toward minimum competency testing with those of the public.

4. Records should be maintained over a period of years to determine if differences in achievement occur between minority students and white students.

5. Studies should be completed to determine the effect of teacher attitudes toward competency testing to student performance on competency tests.

6. Research should be conducted to determine what relationship, if any, television, permissiveness in the family, and the decline of values have to the decline in pupil performance on achievement tests.

7. Reading, mathematics, writing, language, problem-solving, listening skills, and consumer economics should be stressed in the public schools of Tennessee.

8. Members of local boards of education should acquire knowledge about minimum competency testing programs so that they could effectively assume responsibility for the assessment of the elementary program in 1981 (the year local implementation was to begin).
9. Minimum competency tests should not be used solely to determine eligibility for graduation.

10. The objectives of the competency test should match the objectives being taught in the classrooms.

11. Studies should be done to determine the effects of minimum competency testing on students who have mental and/or physical handicaps and are victims of cultural and/or economic deprivation, but who are not exempted from the testing program.

12. Research should be conducted to determine if paraprofessionals and instructional aides available for instructional assistance enhance student performance on achievement tests.

13. Parents and students should be actively involved in the educational process, both during and after school, to provide an atmosphere conducive to student achievement.
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REFERENCES


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APPENDIX A

SUMMARY OF EVENTS RELATED TO BASIC SKILLS TESTING IN TENNESSEE
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June 11, 1976
State Board of Education established a committee to study standards for high school graduation.

October 1, 1976
State Board approved recommendation of committee on high school graduation requirements that basic skills test be developed and administered on a pilot basis to high school seniors during the spring of 1977.

February 11, 1977
State Board approved recommendation that the basic skills test developed for the Denver, Colorado, school system be used as the pilot test to be given during the spring of 1977 to a representative sample of high school seniors in Tennessee.

Week of May 9-13, 1977
Pilot test was administered to 4,250 high school seniors in 27 schools, three from each of the nine development districts. The test, "Proficiency and Review," was obtained from the Denver school system where it had been used since 1959.

July 1977
Initial results of the pilot test were released.

August-September 1977
Public hearings on proficiency testing were conducted at six locations across the state. A two-part educational television program on high
school proficiency testing was aired on ETV stations in Tennessee.

November 10, 1977
State Board adopted statewide diagnostic and proficiency testing program and established a proficiency testing implementation committee to work on development of an eighth grade diagnostic test to be administered the following spring.

February 10, 1978
State Board directed State Department of Education to have an eighth grade diagnostic test developed in compliance with guidelines established by the proficiency testing implementation committee, to be given to all Tennessee public school eighth graders to determine their readiness for the type of test they must pass in high school to receive a diploma upon graduation. State Board also ruled that implementation of the requirement that a diagnostic examination be administered in the fourth, fifth or sixth grade at local board expense should begin during the 1978-79 school year.

March 1978
State Department of Education announced plans to use a test developed for Tennessee by CTB/McGraw-Hill (the testing company that developed the Denver test) as the first eighth grade diagnostic test.

April-May 1978
The "Basic Skills Test," developed by CTB/McGraw-Hill, was administered to public school eighth graders. The test measured 50 educational
objectives in the basic skill areas of mathematics, spelling, language and reading.

May 23, 1978
Results of the first eighth grade test were announced.

August 11, 1978
State Board adopted procedures for developing objectives for the 1979 eighth grade test. The original 50 objectives used for the 1978 eighth grade test were expanded by department staff and sent to approximately 1,400 teachers and other educators for ranking according to importance, and a new list of 80 educational objectives was developed.

November 13, 1978
State Board approved new list of 80 educational objectives to be used in developing state diagnostic and proficiency tests.

January 5, 1979
State Board approved recommendation that the test developed by Scholastic Testing Service measuring 50 of the 80 educational objectives be used for testing eighth graders.

March 9, 1979
State Board reviewed and approved procedures for administering the eighth grade diagnostic test, including special provisions for handicapped students. State Board approved recommendation that the 80 educational objectives be included in the Rules, Regulations and Minimum Standards for approval of schools and emphasized that state-approved private schools must comply with all requirements for diagnostic and proficiency testing in the Rules and Regulations. In
related action, the State Board passed a resolution recommending that the State Textbook Commission take steps to assure that the 80 educational objectives can be identified in future adopted textbook series for grades 1-8 in the areas of mathematics, language, reading, and spelling. State Board also recommended that the Division of Educational Television be requested to develop and air programs explaining the tests.

April 3-4, 1979

Second statewide basic skills, diagnostic test was given to eighth graders.

April 6, 1979

State Board approved proposal for educational television series on basic skills testing to be shown on ETV stations in Tennessee.

May 11, 1979

State Board reviewed results of 1979 eighth grade test and requested State Department of Education staff to develop a research proposal for determining what types of correctable factors are having an influence on the test scores.

June 11, 1979

State Board requested that a list of educational learning objectives for science (including health) and social studies be developed and brought back to the board for approval and that a pilot test subsequently be administered in these areas.
July 6, 1979
State Board established which objectives will be used in developing the high school proficiency tests to be given in 1981, 1982 and in subsequent years. State Board also requested department staff to proceed with the development of educational objectives in social studies and science and to develop separate objectives for health and safety.

August 10, 1979
State Board determined responsibility for costs of state diagnostic and proficiency testing in state-approved private schools. Administration and Policy Committee of the Board discussed future agenda items related to the testing program, including the possibility of requesting state funding for diagnostic testing on a permanent basis in the third, fifth and eighth grades.

April, 1980
Last state-financed eighth-grade diagnostic test administered.
APPENDIX B

OBJECTIVES TO BE TESTED BY THE EIGHTH-GRADE DIAGNOSTIC BASIC SKILLS TEST IN TENNESSEE
(1) MATHEMATICS

(a) ADD FOUR 3-DIGIT, WITH REGROUPING
Given a problem involving the addition of four, three-digit addends, the student will solve the addition problem with regrouping.

(b) SUBTRACT TWO 3-DIGIT, HORIZONTAL, WITH REGROUPING
Given a problem in horizontal format involving the subtraction of two, three-digit numbers, the student will solve the subtraction problem with regrouping.

(c) MULTIPLY 3-DIGIT BY 2-DIGIT, WITH REGROUPING
Given a problem involving the multiplications of a three-digit number by a two-digit number, the student will solve the multiplication problem with regrouping.

(d) ADD THREE MIXED NUMBERS, UNLIKE DENOMINATORS, EXPRESSING ANSWER IN SIMPLEST FORM
Given a problem involving the addition of three mixed numbers with unlike denominators, the student will solve the addition problem involving a common denominator of less than 25 and express the answer in simplest form.

(e) SUBTRACT FRACTION FROM MIXED NUMBER, UNLIKE DENOMINATORS, WITH REGROUPING
Given a problem involving the subtraction of a fraction from a mixed number (unlike denominators), the student will solve the subtraction problem with regrouping.
MULTIPLY MIXED NUMBER BY FRACTION
Given a problem involving the multiplication of a mixed number by a fraction, the student will solve the multiplication problem expressing answer in simplest form.

DIVIDE A MIXED NUMBER OR A WHOLE NUMBER BY A FRACTION
Given a problem involving the division of a mixed number or a whole number by a fraction, the student will solve the division problem expressing the answer in the simplest form.

ADD TWO OR MORE DECIMAL NUMBERS, WITH REGROUPING
Given a problem written in vertical and horizontal form involving the addition of two or more decimal numbers each having three or fewer decimal places, the student will solve the addition problem with regrouping. (At least one problem should involve monetary quantities.)

SUBTRACT TWO DECIMAL NUMBERS, WITH REGROUPING
Given a problem written in vertical or horizontal form involving the subtraction of two decimal numbers each having three or fewer decimal places, the student will solve the subtraction problem with regrouping. (At least one problem should involve monetary quantities.)

MULTIPLY DECIMAL FRACTION BY DECIMAL NUMBER
Given a problem involving the multiplication of a decimal fraction and decimal number, each having three or fewer decimal places, the student will solve the multiplication problem. (At least one problem should involve monetary quantities.)
(k) DIVIDE DECIMAL NUMBER BY WHOLE NUMBER

Given a problem involving the division of a decimal number by a whole number, the student will solve the division problem. (At least one problem should involve monetary quantities.)

(l) CUSTOMARY UNITS OF MEASUREMENT—EQUIVALENCY

Given four customary measurements involving length, weight, volume or time, the student will select an equivalent customary unit of measurement.

(m) PLACE VALUE, DECIMAL

Given a decimal number, the student will identify the digit that is in the thousand's, hundred's, ten's, or one's place.

(n) DECIMAL FRACTION TO PERCENT

Given a decimal fraction expressed in tenths or hundredths, the student will identify the percent for decimal fraction, and conversely.

(o) PERCENT OF A NUMBER

Given a problem that involves finding the percent of a number, the student will solve the problem.

(p) DIVIDE 4-DIGIT NUMBER BY A 1-OR-2 DIGIT NUMBER, WITH REMAINDER

Given a problem involving the division of a four-digit number by a one or two digit number, the student will solve the division problem with a remainder.

(q) SIMPLE WORD PROBLEMS: OPERATION

Given a simple one-step problem, the student will identify the operation required for the solution of the problem.
(r) DECIMAL EQUIVALENCY
Given a simple fraction, the student will be able to write
the decimal equivalent.

(s) READING GRAPHS
Given illustrations of bar, circle, picto-, or broken line
graphs, the student will select the answer which interprets
its meaning.

(t) FINDING THE PERIMETER
Given the lengths (metric units) of the adjacent sides of a
rectangular figure, the student will select the answer which
represents the perimeter.

(u) FINDING AREA
Given the lengths of the adjacent sides of a rectangular
figure, the student will identify the area.

(v) LINEAR MEASUREMENT—CUSTOMARY
Given the drawing of a customary ruler, the student will be
able to measure a given distance to the nearest 1/4 of an
inch.

(w) LINEAR MEASUREMENT—METRIC
Given the drawing of a metric ruler, the student will be able
to measure a given distance to the nearest centimeter.

(x) WRITING A NUMERAL FOR A WORD NAME
Given a word name in thousands, millions, or billions, the
student will choose the equivalent numeral.

(y) ROUNDING OFF NUMBERS
Given a whole number having six or fewer digits, the student
will select the answer which represents the nearest multiple
of ten, hundred, thousand, or ten thousand.

(z) METRIC EQUIVALENCY
Given four measurements involving meters, grams, and liters, the student will be able to select an equivalent metric measurement.

(aa) SIMPLE WORD PROBLEMS: SOLUTION
Given a simple one-step problem, the student will correctly solve the problem.

(bb) COMPARE FOUR DECIMAL NUMBERS
Given four decimal fractions, the student will identify the largest or the smallest.

(cc) DETERMINING AVERAGE (ARITHMETIC MEAN)
Given a problem involving five two-digit whole numbers, the student will select the average (arithmetic mean) thereof. (The resulting answer should be a whole number.)

(dd) MEASURE OF TEMPERATURE
Given an illustration of a thermometer (Celsius or Fahrenheit), the student will select the answer most accurately representing the pictured temperature.

(2) SPELLING

(a) BASE (ROOT) WORD, WITH OR WITHOUT SPELLING CHANGE
Given an affixed word that may or may not require a spelling change and a choice of four words or letter combinations, the student will identify the base (root) word of the affixed word.
(b) SPELLING/PHONETIC SUBSTITUTION
Given a selection of words one of which may have a phonetic substitute in the spelling, the student will identify either the misspelled word or that no spelling errors occur in the words.

(c) SPELLING/MISSING LETTER
Given a selection of words, one of which may have a letter missing in the spelling, the student will identify either the misspelled word or that no spelling errors occur in the words.

(d) SPELLING/EXTRA LETTER
Given a selection of words, one of which may contain an extra letter in the spelling, the student will identify either the misspelled word or that no spelling errors occur in the words.

(e) CONTRACTIONS
Given a selection of words, the student will identify the correctly formed contraction.

(f) SYLLABICATION
Given a choice of four words divided into syllables, the student will identify the correct division.

(g) ALPHABETIZING
Given four choices, the student will identify which word is out of alphabetical order.

(h) DOUBLING THE FINAL CONSONANT
Given the base (root) word, the student will identify the correct spelling when the base (root) word ends with a
consonant and "-ing" or "-ed" is to be added.

(i) **CHANGING "Y" TO "I" OR KEEPING THE "Y"**

Given a base word requiring a spelling change from "y" to "i", the student will identify the correct spelling.

(j) **FORMING PLURALS OF IRREGULAR NOUNS**

Given the singular form of a word, the student will identify the correct plural form.

(3) **LANGUAGE**

(a) **CAPITALIZATION**

Given a sentence and a choice of four words from the sentence, the student will identify the proper noun which should be capitalized.

(b) **COMMA, PHRASES IN A SERIES**

Given a sentence containing phrases in a series and a choice of four places in the sentence, the student will identify the place in the sentence where a comma should go to separate the phrases.

(c) **SENTENCE PUNCTUATION**

Given four sentences (declarative, interrogative, imperative, or exclamatory), the student will choose the correctly punctuated sentence.

(d) **USAGE, IRREGULAR VERBS**

Given a sentence from which the verb has been omitted, the student will choose the correct form of an irregular verb.
(e) USAGE, NOUNS

Given a sentence from which a noun form has been omitted, the student will choose the correct answer from nominative and possessive forms.

(f) SUBJECT, NOUN OR PRONOUN

Given a sentence with a noun or pronoun as the subject and a choice of four words from the sentence, the student will identify the subject.

(g) PARTS OF SPEECH

Given a sentence, the student will identify the part of speech indicated as either noun, verb, adjective, adverb, pronoun, preposition, conjunction, or interjection.

(h) SUBJECT-PREDICATE AGREEMENT, INVERTED ORDER

Given a sentence from which the predicate has been omitted, the student will choose the correct verb form to agree with the subject in number.

(i) SUBJECT-PREDICATE AGREEMENT, COMPOUND SUBJECT

Given a sentence with a compound subject from which the predicate has been omitted, the student will choose the correct verb form to agree with the subject.

(j) SUBJECT-PREDICATE AGREEMENT, INDEFINITE PRONOUN SUBJECT

Given a sentence with an indefinite pronoun subject from which the predicate has been omitted, the student will choose the correct verb form to agree with the subject.

(k) IDENTIFYING SIMPLE SUBJECTS AND VERBS

Given a sentence, the student will identify the simple subject and verb.
(1) IDENTIFYING COMPLETE SENTENCES
Given four choices, the student will identify the complete sentence.

(m) WORD USAGE/DOWNLE NEGATIVES
Given four sentences, the student will identify the sentence with incorrect usage (double negatives).

(n) COMMA, IN DATES AND ADDRESSES
Given a series of dates and addresses, the student will identify which are correctly punctuated.

(o) QUOTATIONS
Given a series of sentences, the student will identify the one in which the quotations are correctly punctuated.

(p) LETTER WRITING
Given the parts of a Friendly Letter or a Business Letter with an Envelope, the student will select the correct arrangement of the parts of the letter and envelope.

(q) PERSONAL PRONOUN
Given a sentence from which a personal pronoun subject or object has been omitted, the student will select the correct form.

(r) AGREEMENT OF POSSESSIVE ADJECTIVE
Given a sentence from which the possessive adjective has been omitted, the student will choose the correct form to agree with the antecedent.

(s) ADJECTIVES OR IRREGULAR ADJECTIVES
Given a sentence from which the compared adjective has been omitted, the student will select the correct form.
(t) VERBS, PRINCIPAL PARTS
Given a sentence from which the verb has been omitted, the student will select the correct form.

(u) VERBS, TROUBLESOME PAIRS
Given a sentence from which the verb has been omitted, the student will choose the correct verb form.

(v) POSSESSIVE NOUNS
Given a series of words, the student will identify the correct possessive form.

(4) READING

(a) SYNONYM IN CONTEXT
Given a sentence containing an underlined word and a choice of four words, the student will identify the synonym for the underlined word.

(b) ANTONYM
Given a word and a choice of four words, the student will identify the antonym for the given word.

(c) WORDS IN CONTEXT
Given an incomplete sentence, the student will use context clues to select the word that would best complete the sentence.

(d) STORY DETAIL/PERSON, PLACE, OR THING
Given a reading passage, the student will identify a story detail about a person, place, or thing.
(e) STORY DETAIL/EVENT OR ACTION
Given a reading passage, the student will identify a story detail about an event or action.

(f) STORY DETAIL/TIME OR SETTING
Given a reading passage, the student will identify a story detail about the time or setting.

(g) STORY DETAIL/SEQUENCE OF EVENTS
Given a reading passage, the student will identify a sequence of events.

(h) MAIN IDEA
Given a reading passage, the student will identify the main idea.

(i) INFERENCE OR CONCLUSION
Given a reading passage, the student will use story clues to identify the answer to a question that requires an inference or conclusion to be drawn.

(j) CAUSE AND EFFECT
Given a reading passage that contains a cause and effect relationship, the student will identify the cause of a given effect, and conversely.

(k) PREDICTING FUTURE ACTION
Given a reading passage, the student will use story clues to identify a probable future action or outcome.

(l) CHARACTER ANALYSIS
Given a reading passage, the student will select the answer which best applies to one of the characters.
(m) FACT OR OPINION
Given a statement from a reading passage, the student will identify the statement as either fact or opinion.

(n) FOLLOWING DIRECTIONS
Given a written set of directions involving several steps, the student will demonstrate an ability to follow this set of directions.

(o) FACT OR FICTION
Given a specific reading passage, the student will be able to identify the passage as fact or fiction.

(p) USING THE DICTIONARY
Given a sample of a dictionary page, the student will identify information presented in a dictionary: word definition, guide words, word pronunciation, and parts of speech.

(q) ENDINGS/SUFFIXES
Given a sentence, the student will select an appropriate ending for the root word underlined in the sentence.

(r) PREFIXES
Given a sentence, the student will select the appropriate prefix for the root word underlined in the sentence.
MINIMUM COMPETENCY TESTING
SURVEY INSTRUMENT
SUPERINTENDENTS

SYSTEM DATA:

1. Name of School System ____________________________ County __________

2. What is the net enrollment of your school system? ______

3. Are most of your schools located in rural areas, metropolitan areas, small towns, inner-city, or evenly distributed? ______

4. What is the percentage of minority students in your system? ______
Of the minority students, what percentage is black? ______

5. What is the predominant economic status of the students' families?
upper class ___ middle class ___ lower class ___

6. How many eighth grade graduates did you have in 1979? ______

7. Was performance on the Eighth Grade Proficiency Test used as a criterion for retaining any students in 1979? Yes ___ No ___
If yes, how many? ______

8. Did you have a part in developing the test items? Yes ___ No ___

9. Does the high school(s) in your system have plans to remediate the deficiencies indicated by the test? Yes ___ No ___

10. Will there be added costs to the system? Yes ___ No ___
If yes, how will these costs be met? ______

11. Do you feel that the test is racially discriminatory? Yes ___ No ___

12. Should teachers have a copy of the test at the beginning of each school year? Yes ___ No ___

13. How often should the test be revised? 1 yr. ___ 2 yrs. ___ 3 yrs. ___ 4 yrs. ___

14. By whom should the test be revised?
teachers ___ principals ___ local school systems ___
state ___ national ___ other ______

15. What percentage of students passed each of the following sections?
   All Students:
   Reading ___ Math ___ Grammar ___ Spelling ___ Language ___

   Minority Students:
   Reading ___ Math ___ Grammar ___ Spelling ___ Language ___

16. What percentage of eighth graders passed all sections of the test? ______
What percentage of black eighth graders passed all sections? ______
PERSONAL DATA: (check appropriate answers)

1. What is your age range: 20-35 ____ 36-49 ____ 50-60 ____ over 60 ____

2. Are you certificated as: Administrator ____ Supervisor ____ Teacher ____

3. How many years experience have you had as the following:
   Administrator ____ Supervisor ____ Teacher ____

4. What is your highest level of education achieved?
   B.A. or B.S. ____
   M.A. or M.S. + 30 ____
   Ed.B. ____
   H.A. or H.S. ____
   M.A. or M.S. + 45 ____
   Ed.D. ____
   H.A. or H.S. + 15 ____
   M.A. or M.S. + 60 ____
   Ph.D. ____

ATTITUDES:

The following statements are designed to allow you to describe your attitudes toward minimum competency testing. Please read each question carefully and then rank the possible answers in the order of preference beginning with "1." If you feel that a possible answer should not even be considered, please place an "O" before it.

A. Rank the following in the order that you feel each has contributed to a decline in pupil performance on achievement tests.

   (1) television
   (2) permissiveness in the family
   (3) women's liberation
   (4) higher divorce rate
   (5) decline of religion
   (6) civil rights movement
   (7) forced busing
   (8) general decline of values
   (9) irregular attendance in school

B. What skills does a student need to be considered minimally competent?
   (Consider this question separately from Item C.)

   (1) spelling
   (2) writing (composition)
   (3) mathematics (computation)
   (4) reading
   (5) language
   (6) grammar

C. Which of these skills does a student need most to be considered minimally competent?

   (1) social studies and history
   (2) problem-solving
   (3) consumer economics
   (4) democratic processes
   (5) listening skills
   (6) science
D. What agency should determine the level of minimum competence for the state’s students? (Rank in order of preference.)

1. federal government
2. local boards of education
3. state government
4. local superintendent
5. state board of education
6. state department of education
7. state superintendent
8. state and local boards of education
9. state board and state department of education

E. What should minimum competency testing be used to determine?

1. diagnosis of deficiencies
2. need for remediation
3. promotion from grade to grade
4. graduation from eighth grade
5. graduation from high school
6. early exit from high school

F. In which grades should minimum competency tests be given?

1. K-12
2. 3, 6, 9, and 12
3. 8 and 12
4. 8 and 11
5. 9 through 12
6. 8
7. 12
8. other

G. If "too many" students fail the test, which of the following should be done?

1. teach the test
2. develop an easier test
3. lower the passing score
4. stop testing
5. remediate deficiencies and then retest
6. review objectives of the test to see if they match the school’s objectives
7. set different passing scores for "exceptional" children

H. What kind of test should be given to measure minimum competency?

1. a standardized test published by an independent company
2. multiple choice questions developed locally
3. paper-and-pencil tests administered by the teacher of each course
4. criterion-referenced tests (questions match school’s objectives)
5. real life performance in appropriate settings
6. personal interviews and work samples
I. Who should develop the tests?

____ (1) teacher working as a committee statewide
____ (2) independent, commercial testing corporations
____ (3) federal government
____ (4) state boards of education with the state department of education
____ (5) local boards of education with the aid of local teachers
____ (6) textbook publishing companies
____ (7) other

J. Should a child be exempted from the tests? Yes ______ No ______
If yes, rank the reasons.

____ (1) if he is a resident of a slum area or is culturally deprived
____ (2) if he is physically handicapped
____ (3) if he is economically deprived
____ (4) if he is mentally handicapped
____ (5) if he is a member of a minority group

K. What can be done to increase student achievement by the school system?

____ (1) greater per pupil expenditure
____ (2) more materials to use in the classroom
____ (3) less time spent in such courses as art, music, drama
____ (4) revision of the curricula to meet the objectives of the test
____ (5) more learning and/or interest centers
____ (6) more current textbooks
____ (7) less emphasis on athletic programs
____ (8) more individualized instruction
____ (9) frequent revision of the test to match school's objectives

L. What can school board members do to improve student achievement?

____ (1) provide larger teacher salaries
____ (2) increase fringe benefits for teachers
____ (3) allow more leave time for teachers to further their education
____ (4) hire more paraprofessionals to relieve teachers
____ (5) campaign for higher property taxes to support the schools
____ (6) make board policies more flexible for innovative teachers
____ (7) hire more instructional aides

H. What can the school superintendent do to improve student achievement?

____ (1) provide more in-service for teachers
____ (2) obtain more federal funds for remediation needs
____ (3) seek teacher input for workshops needed
____ (4) provide more assistance for teachers through supervisory help
____ (5) hire effective teachers even if they cost more
____ (6) lower the pupil-teacher ratio
____ (7) hire additional teachers to provide remedial help to students
N. What can the building principal do to improve student achievement?

1. Make certain that teachers have adequate supplies
2. Encourage teachers to teach the test
3. Encourage teachers to further their education
4. Provide release time for teachers to observe in other schools
5. Allow teachers to air grievances without repercussions
6. Maintain constant communication with teachers, students, and parents about pupil deficiencies
7. Place more emphasis on academics and less on athletics

O. What can teachers do to improve student achievement?

1. Develop relevant courses of study and objectives
2. Teach the test
3. Become involved in the selection of instructional materials
4. Spend more time reviewing basic skills each day
5. Provide more supervised study time at school
6. Give remedial help after school
7. Help develop test items that correspond to the school's objectives
8. Maintain stricter discipline in classrooms
9. Spend more time in large group instruction

P. What can parents do to improve student achievement?

1. Supervise homework of students
2. Reduce time spent watching television
3. Reduce time spent in athletic programs
4. Provide more reading material in the home
5. Give monetary or material rewards for good performance
6. Give more verbal support and encouragement

Q. What can students do to improve their achievement?

1. Develop good study habits
2. Allot a certain amount of time each night for study
3. Watch less television
4. Participate less in athletics
5. Attend fewer social functions
6. Obtain more rest each night
7. Spend less time telephoning friends
8. Develop a serious attitude toward learning
9. Maintain a well-balanced diet

COMMENTS

If you would like to make any comments or suggestions about this survey instrument, please make them in the space below.
MINIMUM COMPETENCY TESTING
SURVEY INSTRUMENT
PRINCIPAL

SCHOOL DATA:

1. Name of School ____________________________ County ____________________

2. Is your school classified as one of these?
   elementary ___ middle school ___ junior high ___ high ___

3. What is the enrollment of your school? ______

4. Is your school located in one of these areas?
   rural ___ small town or suburb ___ metropolitan ___ inner-city ___

5. What is the percentage of minority students in the school population? ______
   Of the minority students, what percentage is black? ______

6. What is the predominant economic status of the students' families?
   upper class ___ middle class ___ lower class ___

7. How many eighth grade graduates did you have in 1979? ______

8. Was performance on the Eighth Grade Proficiency Test used as a criterion for retaining any students in 1979? Yes ___ No ___
   If yes, how many? ______

9. How much time was allotted students to finish each section of the test? ______
   Were breaks given between sections? Yes ___ No ___
   Was talking permitted during the test? Yes ___ No ___
   Was the testing area distraction-free? Yes ___ No ___
   How many days were required to administer the entire test? ______

10. Did you have a part in developing the test items? Yes ___ No ___

11. Does the high school that your eighth grade graduates normally attend have plans to remediate the deficiencies indicated by the test? Yes ___ No ___

12. Do you feel that the test is racially discriminatory? Yes ___ No ___

13. Should teachers have a copy of the test at the beginning of each school year? Yes ___ No ___

14. How often should the test be revised? 1 yr. ___ 2 yrs. ___ 3 yrs. ___ 4 yrs. ___

15. By whom should the test be revised?
   teachers ___ principal ___ local school system ___ state ___ national ___ other ___

16. Do you think the test measured the objectives of your school? Yes ___ No ___

17. What percentage of your eighth graders passed all sections of the test? ______
   What percentage of black students passed all sections of the test? ______

18. What percentage of students passed each of the following sections?

   All Students:
   Reading ___ Math ___ Grammar ___ Spelling ___ Language ___

   Minority Students:
   Reading ___ Math ___ Grammar ___ Spelling ___ Language ___
PERSONAL DATA: (check appropriate answers)

1. What is your age range: 20-35 _ _ 36-49 _ _ 50-60 _ _ over 60 _ _

2. Are you certificated as: Administrator _ _ Supervisor _ _ Teacher _ _

3. How many years experience have you had as the following:
   Administrator _ _ Supervisor _ _ Teacher _ _

4. What is your highest level of education achieved?
   B.A. or B.S. _ _ H.A. or H.B. + 30 _ _ Ed.B. _ _
   H.A. or H.B. _ _ H.A. or H.B. + 45 _ _ Ed.D. _ _
   H.A. or H.S. + 15 _ _ H.A. or H.S. + 60 _ _ Ph.D. _ _

ATTITUDES:

The following statements are designed to allow you to describe your attitudes toward minimum competency testing. Please read each question carefully and then rank the possible answers in the order of preference beginning with "1." If you feel that a possible answer should not even be considered, please place an "O" before it.

A. Rank the following in the order that you feel each has contributed to a decline in pupil performance on achievement tests.

   (1) television _ _
   (2) permissiveness in the family _ _
   (3) women's liberation _ _
   (4) higher divorce rate _ _
   (5) decline of religion _ _
   (6) civil rights movement _ _
   (7) forced busing _ _
   (8) general decline of values _ _
   (9) irregular attendance in school _ _

B. What skills does a student need to be considered minimally competent?
   (Consider this question separately from Item C.)

   (1) spelling _ _
   (2) writing (composition) _ _
   (3) mathematics (computation) _ _
   (4) reading _ _
   (5) language _ _
   (6) grammar _ _

C. Which of these skills does a student need most to be considered minimally competent?

   (1) social studies and history _ _
   (2) problem-solving _ _
   (3) consumer economics _ _
   (4) democratic processes _ _
   (5) listening skills _ _
   (6) science _ _
D. What agency should determine the level of minimum competence for the state's students? (Rank in order of preference.)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>federal government</td>
</tr>
<tr>
<td>2</td>
<td>local boards of education</td>
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<tr>
<td>3</td>
<td>state government</td>
</tr>
<tr>
<td>4</td>
<td>local superintendent</td>
</tr>
<tr>
<td>5</td>
<td>state board of education</td>
</tr>
<tr>
<td>6</td>
<td>state department of education</td>
</tr>
<tr>
<td>7</td>
<td>state superintendent</td>
</tr>
<tr>
<td>8</td>
<td>state and local boards of education</td>
</tr>
<tr>
<td>9</td>
<td>state board and state department of education</td>
</tr>
</tbody>
</table>

E. What should minimum competency testing be used to determine?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>diagnosis of deficiencies</td>
</tr>
<tr>
<td>2</td>
<td>need for remediation</td>
</tr>
<tr>
<td>3</td>
<td>promotion from grade to grade</td>
</tr>
<tr>
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F. In which grades should minimum competency tests be given?

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<th>Rank</th>
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<td>8</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>other</td>
</tr>
</tbody>
</table>

G. If "too many" students fail the test, which of the following should be done?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>teach the test</td>
</tr>
<tr>
<td>2</td>
<td>develop an easier test</td>
</tr>
<tr>
<td>3</td>
<td>lower the passing score</td>
</tr>
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<td>stop testing</td>
</tr>
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<td>remediate deficiencies and then retest</td>
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<td>6</td>
<td>review objectives of the test to see if they match the school's objectives</td>
</tr>
<tr>
<td>7</td>
<td>set different passing scores for &quot;exceptional&quot; children</td>
</tr>
</tbody>
</table>

H. What kind of test should be given to measure minimum competency?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Kind of Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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5. Local boards of education with the aid of local teachers
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J. Should a child be exempted from the tests? Yes No

If yes, rank the reasons.

1. If he is a resident of a slum area or is culturally deprived
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L. What can school board members do to improve student achievement?

1. Provide larger teacher salaries
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6. Lower the pupil-teacher ratio
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Q. What can students do to improve their achievement?

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7. Spend less time telephoning friends
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9. Maintain a well-balanced diet

COMMENTS

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APPENDIX E

TEACHERS' QUESTIONNAIRE
MINIMUM COMPETENCY TESTING
SURVEY INSTRUMENT
TEACHERS

SCHOOL DATA:

1. Name of School ____________________________ County __________________

2. What is the percentage of minority students in the eighth grade? ______
   Of the minority students, what percentage is black? ______

3. What is the predominant economic status of the students' families?
   upper class _____ middle class _____ lower class _____

4. How many eighth grade graduates did you have in 1979? ______

5. Was performance on the Eighth Grade Proficiency Test used as a criterion
   for retaining any students in 1979? Yes ____ No ____

6. How much time was allotted student to finish each part of the test? ______
   Were breaks given between sections? Yes ____ No ____
   How many days were required to administer the entire test? ______
   Was talking permitted during the test? Yes ____ No ____
   Was the testing room distraction-free? Yes ____ No ____

7. Did you have a part in developing the test items? Yes ____ No ____

8. Does the high school that your eighth grade graduates normally
   attend have plans to remediate their deficiencies as
   indicated by the test? Yes ____ No ____

9. Do you feel that the test is racially discriminatory? Yes ____ No ____

10. Should teachers have a copy of the test at the beginning
    of each school year? Yes ____ No ____

11. How often should the test be revised? 1 yr. ____ 2 yrs. ____ 3 yrs. ____ 4 yrs. ____

12. By whom should the test be revised?

   teachers ____ principals ____ local school systems ____
   state ____ national ____ other ______________________

13. Do you think the test measured the objectives of your
    school? Yes ____ No ____

14. What percentage of your eighth graders passed all sections of the test? ______
    What percentage of black students passed all sections of the test? ______

15. What percentage of students passed each of the following sections?

   All Students:
   Reading ____ Math ____ Grammar ____ Spelling ____ Language ____

   Minority Students:
   Reading ____ Math ____ Grammar ____ Spelling ____ Language ____
PERSONAL DATA: (check appropriate answers)

1. What is your age range: 20-35 ___ 36-49 ___ 50-60 ___ over 60 ___

2. Are you certificated as: Administrator ___ Supervisor ___ Teacher ___

3. How many years experience have you had as the following:
   Administrator ___ Supervisor ___ Teacher ___

4. What is your highest level of education achieved?
   B.A. or B.S. ___ N.A. or N.S. + 30 ___ Ed.B. ___
   H.A. or H.S. ___ N.A. or N.S. + 45 ___ Ed.D. ___
   H.A. or H.S. + 15 ___ N.A. or N.S. + 60 ___ Ph.D. ___

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   ______ (5) decline of religion
   ______ (6) civil rights movement
   ______ (7) forced busing
   ______ (8) general decline of values
   ______ (9) irregular attendance in school

B. What skills does a student need to be considered minimally competent?
   (Consider this question separately from Item C.)

   ______ (1) spelling
   ______ (2) writing (composition)
   ______ (3) mathematics (computation)
   ______ (4) reading
   ______ (5) language
   ______ (6) grammar

C. Which of these skills does a student need most to be considered minimally competent?

   ______ (1) social studies and history
   ______ (2) problem-solving
   ______ (3) consumer economics
   ______ (4) democratic processes
   ______ (5) listening skills
   ______ (6) science
D. What agency should determine the level of minimum competence for the state's students? (Rank in order of preference.)

(1) federal government
(2) local boards of education
(3) state government
(4) local superintendent
(5) state board of education
(6) state department of education
(7) state superintendent
(8) state and local boards of education
(9) state board and state department of education

E. What should minimum competency testing be used to determine?

(1) diagnosis of deficiencies
(2) need for remediation
(3) promotion from grade to grade
(4) graduation from eighth grade
(5) graduation from high school
(6) early exit from high school

F. In which grades should minimum competency tests be given?

(1) K-12
(2) 3, 6, 9, and 12
(3) 8 and 12
(4) 8 and 11
(5) 9 through 12
(6) 8
(7) 12
(8) other

G. If "too many" students fail the test, which of the following should be done?

(1) teach the test
(2) develop an easier test
(3) lower the passing score
(4) stop testing
(5) remediate deficiencies and then retest
(6) review objectives of the test to see if they match the school's objectives
(7) set different passing scores for "exceptional" children

H. What kind of test should be given to measure minimum competency?

(1) a standardized test published by an independent company
(2) multiple choice questions developed locally
(3) paper-and-pencil tests administered by the teacher of each course
(4) criterion-referenced tests (questions match school's objectives)
(5) real life performance in appropriate settings
(6) personal interviews and work samples
I. Who should develop the tests?

1. teacher working as a committee statewide
2. independent, commercial testing corporations
3. federal government
4. state boards of education with the state department of education
5. local boards of education with the aid of local teachers for local implementation
6. textbook publishing companies
7. other

J. Should a child be exempted from the tests? Yes ___ No ___

1. if he is a resident of a slum area or is culturally deprived
2. if he is physically handicapped
3. if he is economically deprived
4. if he is mentally handicapped
5. if he is a member of a minority group

K. What can be done to increase student achievement by the school system?

1. greater per pupil expenditure
2. more materials to use in the classroom
3. less time spent in such courses as art, music, drama
4. revision of the curricula to meet the objectives of the test
5. more learning and/or interest centers
6. more current textbooks
7. less emphasis on athletic programs
8. more individualized instruction
9. frequent revision of the test to match school's objectives

L. What can school board members do to improve student achievement?

1. provide larger teacher salaries
2. increase fringe benefits for teachers
3. allow more leave time for teachers to further their education
4. hire more paraprofessionals to relieve teachers
5. campaign for higher property taxes to support the schools
6. make board policies more flexible for innovative teachers
7. hire more instructional aides

M. What can the school superintendent do to improve student achievement?

1. provide more in-service for teachers
2. obtain more federal funds for remediation needs
3. seek teacher input for workshops needed
4. provide more assistance for teachers through supervisory help
5. hire effective teachers even if they cost more
6. lower the pupil-teacher ratio
7. hire additional teachers to provide remedial help to students
N. What can the building principal do to improve student achievement?

________ (1) make certain that teachers have adequate supplies
________ (2) encourage teachers to teach the test
________ (3) encourage teachers to further their education
________ (4) provide release time for teachers to observe in other schools
________ (5) allow teachers to air grievances without repercussions
________ (6) maintain constant communication with teachers, students, and parents about pupil deficiencies
________ (7) place more emphasis on academics and less on athletics

O. What can teachers do to improve student achievement?

________ (1) develop relevant courses of study and objectives
________ (2) teach the test
________ (3) become involved in the selection of instructional materials
________ (4) spend more time reviewing basic skills each day
________ (5) provide more supervised study time at school
________ (6) give remedial help after school
________ (7) help develop test items that correspond to the school's objectives
________ (8) maintain stricter discipline in classrooms
________ (9) spend more time in large group instruction

P. What can parents do to improve student achievement?

________ (1) supervise homework of students
________ (2) reduce time spent watching television
________ (3) reduce time spent in athletic programs
________ (4) provide more reading materials in the home
________ (5) give monetary or material rewards for good performance
________ (6) give more verbal support and encouragement

Q. What can students do to improve their achievement?

________ (1) develop good study habits
________ (2) allot a certain amount of time each night for study
________ (3) watch less television
________ (4) participate less in athletics
________ (5) attend fewer social functions
________ (6) obtain more rest each night
________ (7) spend less time telephoning friends
________ (8) develop a serious attitude toward learning
________ (9) maintain a well-balanced diet

COMMENTS

If you would like to make any comments or suggestions about this survey instrument, please make them in the space below.
APPENDIX F

LETTER ACCOMPANYING QUESTIONNAIRES
FOR FIELD TESTING
January 8, 1980

Dear

I hope that you have time to read this letter and can react favorably, particularly since it is of utmost importance to me.

My name is Judy Walters and I am completing the requirements for the Ed. D. degree at East Tennessee State University. The purpose of this letter is to acquaint you with the research study I am doing and to request your assistance in validating the questionnaire relative to the study.

The purpose of my study is to analyze and compare attitudes of superintendents, principals, and teachers toward minimum competency testing in Tennessee. Before I can proceed with the actual study, I would like to have a small group of teachers, principals, and superintendents respond to the questionnaire and offer suggestions and comments about how to clarify or improve it. If some of the introductory questions ask for information not readily available, simply indicate that and then complete the remaining sections of the questionnaire.

I have enclosed seven questionnaires and self-addressed, stamped envelopes. One questionnaire is for you, the superintendent; three are for principals who have eighth grade teachers at their schools; and three are for eighth grade teachers who administered the Eighth Grade Proficiency Exam in 1979. Please encourage the people whom you select to receive the questionnaires to complete them and return them to me as soon as possible, along with comments.

I will sincerely appreciate the responses to the questionnaire, as well as the accompanying subjective comments. Names of all respondents and systems will be kept anonymous.

Thanking you in advance for your assistance in this endeavor, I remain

Sincerely yours,

Judy A. Walters

[Signature]

Dr. Floyd Edwards

Major Advisor
APPENDIX G

LETTER EXPLAINING INTENT OF THE STUDY

TO SUPERINTENDENTS
Dear Sir:

I hope that you have time to read this letter and can react favorably, particularly since it is of utmost importance to me.

By way of introduction, my name is Judy Walters and I am a teacher in the Greene County School System. I am presently completing the requirements for the Ed. D. degree at East Tennessee State University. This letter is to request your assistance in the collection of data for my dissertation.

The purpose of my study is to survey and compare the attitudes of selected public school superintendents, principals, and eighth grade teachers toward minimum competency testing. A stratified random sample of the school systems in Tennessee was chosen to represent all the systems. Your system was one of those selected for inclusion in the study.

You will be receiving a packet of materials in a few days which will include seven questionnaires, a letter of explanation, and return envelopes. If you endorse my study and wish to participate, it would be necessary for you to complete one of the questionnaires and, also, to select any three eighth grade teachers who helped administer the eighth grade proficiency test in 1979 and a maximum of three principals who supervise eighth grade teachers to complete the questionnaire.

I sincerely hope that you will be able to approve and assist in this study. I assure you that the names of systems, superintendents, principals, and teachers will not be used in the study, and that no comparisons will be made between schools or systems. If you would like a copy of the findings of the study, I would be happy to provide you with that information.

Please let me take this opportunity to thank you in advance for your consideration of this project. Your assistance in helping me complete this study will be greatly appreciated.

Sincerely yours,

Judy A. Walters
Judy A. Walters
APPENDIX H

LETTER ACCOMPANYING QUESTIONNAIRES
Dear Sir:

I am enclosing the questionnaires for the research project which I described to you in my letter of February 22, 1980. To reiterate, if you are willing to assist me in collecting data for my dissertation, please complete one of the enclosed questionnaires and distribute the remaining questionnaires and return envelopes to three eighth grade teachers in your system who have direct knowledge of the administration of the eighth grade proficiency test in 1979 and a maximum of three principals who supervise eighth grade teachers. Questionnaires are appropriately labeled.

Again, may I say that your assistance in the completion of this project is invaluable to me. Sincerely yours,

Judy A. Walters

Dr. Floyd H. Edwards
Major Advisor
APPENDIX I

LETTER ACCOMPANYING FOLLOW-UP QUESTIONNAIRES
March 25, 1960

Dear

I recently wrote to you requesting assistance in collecting data for my doctoral dissertation and forwarded several questionnaires concerning attitudes of superintendents, principals, and teachers about minimum competency testing. As yet, I have not received an adequate return of questionnaires to complete the study to which I am deeply committed.

In case you have misplaced the original questionnaires I mailed to you, I am enclosing additional questionnaires that are labeled for the appropriate recipients. If you, as superintendent, could have these distributed for me, I might then receive the needed responses to complete the study.

I deeply appreciate your assistance and wish to thank you in advance for your every consideration.

Sincerely yours,

[Handwritten签名]

Floyd H. Edwards
Major Advisor

Judy A. Walters
Doctoral Candidate
APPENDIX J

PERCENTAGES OF STUDENTS WHO PASSED THE 1979 EIGHTH-GRADE TEST
Table 19
Percentages of Students Who Passed All Sections of the 1979 Eighth-Grade Test

<table>
<thead>
<tr>
<th>Group</th>
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<th>20</th>
<th>30</th>
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Note. Not enough minority figures to report.

Table 20
Percentages of Students Who Passed the Reading Section of the 1979 Eighth-Grade Test

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Note. Not enough minority figures to report.
### Table 21

Percentages of Students Who Passed the Math Section of the 1979 Eighth-Grade Test

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Note. Not enough minority figures to report.

### Table 22

Percentages of Students Who Passed the Spelling Section of the 1979 Eighth-Grade Test

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Note. Not enough minority figures to report.
Table 23
Percentages of Students Who Passed the Language Arts Section of the 1979 Eighth-Grade Test

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Note. Not enough minority figures to report.
APPENDIX K

COMPARISON OF FIRST, SECOND, AND THIRD PRIORITIES
OF SUPERINTENDENTS, PRINCIPALS, AND TEACHERS
Table 24

First Choice Responses

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Table 25

Second Choice Responses

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Third Choice Responses

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</table>
VITA

JUDY ANN WALTERS

Personal Data:  
Date of Birth: August 21, 1949  
Place of Birth: Middlesboro, Kentucky  
Marital Status: Single

Education:  
Public Schools, Rose Hill, Virginia; Woodstock, Ohio; and North Lewisburg, Ohio.  
Lincoln Memorial University, Harrogate, Tennessee; biology and chemistry, B.S., 1970.  
East Tennessee State University, Johnson City, Tennessee; elementary supervision, M.A., 1975.  
East Tennessee State University, Johnson City, Tennessee; administration, Ed.D., 1980.

Professional Experience:  
Teacher, Doak Elementary School; Greeneville, Tennessee, 1974-1976.  
Member, Editorial Board of Educational Forum magazine, 1975-1976.  
Student Teaching Coordinator, College of Education, East Tennessee State University, 1980.  
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Professional Memberships:  
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Publications:  