The relationship between the Commonwealth of Virginia graduation competency test (GCT) and the content of the individualized education programs (IEPs) of learning disabled and emotionally disturbed high school students

Joseph Patrick Nealon

College of William & Mary - School of Education

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THE RELATIONSHIP BETWEEN THE COMMONWEALTH OF VIRGINIA GRADUATION COMPETENCY TEST (GCT) AND THE CONTENT OF THE INDIVIDUALIZED EDUCATION PROGRAMS (IEPS) OF LEARNING DISABLED AND EMOTIONALLY DISTURBED HIGH SCHOOL STUDENTS

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The Relationship Between the Commonwealth of Virginia
Graduation Competency Test (GCT) and the Content
of the Individualized Education Programs (IEPs) of
Learning Disabled and Emotionally Disturbed High
School Students

A Dissertation
Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

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

Joseph Patrick Nealon
The Relationship Between the Virginia Graduation Competency Test and the Individualized Educational Program (IEP) of Learning Disabled and Emotionally Disturbed High School Students

by

Joseph Patrick Nealon

Accepted May 1983

Royce W. Chesser
Professor of Education

Robert J. Hanny
Professor of Education

Louis P. Messier
Chairman of Doctoral Committee
DEDICATION

To those members of the faculty of the School of Education of the College of William and Mary who expressed confidence in my potential.
I wish to acknowledge the very able assistance provided by the staff of the Government Documents, Interlibrary Loan and Audio-Visual sections of the Earl Gregg Swem Library of the College of William and Mary.

Special thanks to Mrs. Kathy Harris for patience and endurance in the typing of this dissertation, and, in particular, to Mr. James T. Micklem and Mr. Leslie W. Jones of the Virginia Department of Education.
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Chapter I

Introduction

During the past decade, in response to declining student achievement test scores and the resultant erosion of confidence in the quality of public education, a number of states have initiated legislative or administrative action to develop and implement statewide minimum competency test (MCT) programs (Baratz, 1979; Carter, 1979a; Cavelti, 1978; Eckland, 1980; Gallup, 1979; Lewis, 1979; Loheide, 1979; Resnick, 1980; Riegel and Lovell, 1980). As of January 1, 1980, thirty-six states, including the Commonwealth of Virginia, had mandated some form of MCT programs for elementary and secondary school students (Pipho, 1980a,b).

In Virginia and in at least five other states a major purpose of the state mandated MCT programs is to assure, through a uniform statewide test, that students who are awarded a standard high school diploma have achieved a minimum level of proficiency in specified educational skills (Gorth and Perkins, 1979a,b; Impara, 1980). However, reservations have been expressed with respect to whether certain student groups have been provided meaningful and adequate opportunities to benefit from the provision of the instructional programs necessary for developing minimal proficiency in the skills assessed by state MCT programs (Rosewater, 1979). For example, in the first major legal challenge of the propriety of the relationship of a state MCT program to the awarding of diplomas (Education of the Handicapped, 1981), the Fifth U.S. Circuit Court of Appeals, in Debra P. v.
Turlington (644 F. 2d 397 [1981]), ruled that Florida school systems could not deny diplomas to students who fail the Florida MCT until the state proves that its test is a fair test of what is taught in the classroom and that the test does not discriminate against black students who may have experienced "educational deprivation" (p. 408) under the previously segregated Florida state program of public education. In a situation reflecting a similar issue, the Illinois State Board of Education, in its examination of a complaint filed on behalf of fifteen special education students, concluded that handicapped students who did not pass the state MCT during the 1980-1981 school year were entitled to diplomas as a result of insufficient notice of the MCT requirement. The decision of the Board was based upon evidence that the complainant students had not been provided instruction related to as much as 90% of the material covered by the test (Education for the Handicapped, Law Report, 1981).

**Statement of the Problem**

This investigation arose from a need to examine the relationship between the Virginia Graduation Competency Test (GCT) assessment of student proficiency in specified educational skills and the educational skills content of the annual goals and short-term instructional objectives of the individualized education programs (IEPs) of handicapped high school students.

**Specific Research Questions**

There are four central questions to be answered:

1. Do the present level of performance statements and annual
goals statements of the IEPs of handicapped students who have failed the GCT include students' GCT scores and specific statements of students' identified needs for instruction in specific GCT skills?

2. Are the reading and mathematic skills assessed by the GCT incorporated into the annual goals and short-term instructional objectives of the IEPs of handicapped students?

3. Do the IEPs which are developed by local public school personnel in the state of Virginia clearly identify the school personnel responsible for providing GCT-related instruction to handicapped students who fail the GCT?

4. What is the relationship between the content of the annual goals and short-term instructional objectives of the IEPs of handicapped students and the performance of handicapped students on the GCT?

**Hypothesis**

The research hypotheses developed for this study are:

**Hypothesis 1.** An analysis of IEPs developed by local school division personnel in the Commonwealth of Virginia will indicate that students' GCT scores and specific weaknesses in GCT reading and math skills, are not being systematically incorporated into IEP statements of handicapped students' present levels of educational performance.

**Hypothesis 2.** An analysis of IEPs developed by local school personnel in the Commonwealth of Virginia will indicate that
IEP annual goals statements for handicapped students who have
gained one or both sections of the GCT do not refer to anticipated
student performance on a future GCT.

Hypothesis 3. An analysis of IEPs developed by local school
personnel in the Commonwealth of Virginia will indicate that the
skills assessed by the GCT in reading and math are not being in-
corporated into the short-term instructional objectives of the
IEPs of handicapped students who have failed one or both sections
of the GCT.

Hypothesis 4. An analysis of IEPs developed by local school per-
sonnel in the Commonwealth of Virginia will indicate that the
school personnel responsible for providing GCT-related instruct-
ional programs to handicapped students are not clearly identified
in the IEPs.

Hypothesis 5. An analysis of the 1981-1982 IEPs of handicapped
students who failed one or both sections of the March, 1981 GCT
and who subsequently took the March, 1982 GCT will indicate that
revisions of 1981 IEPs which incorporated GCT skills weaknesses
into IEP statements of annual goals and short-term instructional
objectives are positively related to student performance on the
March, 1982 GCT.

Significance of the Problem

The Virginia GCT program was initiated during the fall semester
of the 1978-1979 school year. Students must pass both the reading and
mathematics sections of the CCT as a criteria of eligibility for the award of a regular high school diploma.

Performance data for handicapped students taking the CCT during the period from the fall of 1978 through the spring of 1981 are presented in Tables one through six. These tables were constructed from data contained in CCT documents provided by the Division of Research, Evaluation and Testing, Department of Education of the Commonwealth of Virginia.

**TABLE I**  
**SUMMARY OF STUDENT PERFORMANCE**  
NONHANDICAPPED-HANDICAPPED  
**VIRGINIA GRADUATION COMPETENCY TESTS (CCT)**  
Fall 1978

<table>
<thead>
<tr>
<th>Student Category</th>
<th>% Passing Both Sections</th>
<th>% Passing One Section Only</th>
<th>% Failing Both Sections</th>
<th>% Total Failing One or Both CCT Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonhandicapped 68,665*</td>
<td>82.2</td>
<td>10.0</td>
<td>7.8</td>
<td>17.8</td>
</tr>
<tr>
<td>Handicapped 1,484*</td>
<td>27.2</td>
<td>13.7</td>
<td>52.2</td>
<td>72.9</td>
</tr>
</tbody>
</table>

*Includes only students who took both tests for certification for graduation. Commonwealth of Virginia 6, 1979.

Table 1 provides data which contrast the performance of handicapped and non-handicapped tenth grade students tested in the initial 1978 administration of the CCT. The data of Table 1 indicate that 72.9% of the 1,484 tenth grade handicapped students tested failed one or both sections of the CCT. In contrast, only 17.8% of the 68,665
non-handicapped tenth grade students tested failed one or both sections of the same test.

### Table 2

**SUMMARY OF FAILING RATE**

**HANDICAPPED STUDENTS**

**VIRGINIA GRADUATION COMPETENCY TESTS (GCT)**

**Spring 1979 - Fall 1980**

<table>
<thead>
<tr>
<th>Testing Session/ Total MC3 Tested</th>
<th>Handicapped Students Failing One Section</th>
<th>Handicapped Students Failing Both Sections</th>
<th>Handicapped Students One or Both Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring 1979</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,408**</td>
<td>565 (10.73)</td>
<td>1,710 (56.15)</td>
<td>2,275 (66.88)</td>
</tr>
<tr>
<td><strong>Spring 1980</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,874**</td>
<td>408 (21.77)</td>
<td>1,105 (58.96)</td>
<td>1,513 (80.73)</td>
</tr>
<tr>
<td><strong>Fall 1980</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>406**</td>
<td>75 (18.56)</td>
<td>276 (66.08)</td>
<td>351 (86.16)</td>
</tr>
</tbody>
</table>

1. Commonwealth of Virginia 7, 1979 (Total-special summary-students taking both tests for credit)
2. Commonwealth of Virginia 8a, 1980 (All handicapped students, combined tests-summary)
3. Commonwealth of Virginia 8b, 1980 (Totals-handicapped students combined tests summary)

**Ninth and tenth grade

**Tenth grade only; taking both sections for graduation credit**

The data of Table 2 also indicate that a large percentage (66.88%, 80.73% and 84.56%) of the handicapped students tested during the 1979 and 1980 GCT sessions failed one or both sections of the test.
Performance data for learning disabled students in grades nine and ten who participated in the 1979 and 1980 GCT sessions are provided in Table 3. The data of Table 3 indicate that a high percentage (52.5%, 76.15%, 76.28%, and 77.7%) of these students failed to earn the minimum passing scaled score of 70 on one or both sections of the 1979 and 1980 GCTs.
The data of Tables 1-3 clearly indicate that in each test situation from the fall of 1978 through the fall of 1980 a high percentage of the handicapped students taking the GCT failed one or both sections of the test.

**Table 4**

**Comparison of 1979 and 1981 Performance of Learning Disabled Students Taking Both Sections of the GCT**

<table>
<thead>
<tr>
<th>Testing Year</th>
<th>LDS Pass</th>
<th>% LDS</th>
<th>LDS Fail</th>
<th>% LDS</th>
<th>LDS Fail One or Both Sections</th>
<th>% LDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>1,479</td>
<td>42.3</td>
<td>23.0</td>
<td>33.7</td>
<td>57.6</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>3,358</td>
<td>59.7</td>
<td>24.1</td>
<td>16.8</td>
<td>60.8</td>
<td></td>
</tr>
</tbody>
</table>

*Listed in Commonweal of Virginia 12, 1981, Table 5.

**% passing one GCT section in Commonwealth of Virginia 12, 1981. Table 4 is equivalent to GCT failing one GCT section.

LDS - Learning Disabled Students

Table 4 provides cumulative data comparing the performance of learning disabled students taking the GCT in the spring of 1979 with the performance of learning disabled students taking the GCT in the spring of 1981. The data of Table 4 indicate that the percentage of learning disabled students failing one or both sections of the GCT in 1981 (40.8%) was 16.8% lower than the percentage of learning disabled students failing the GCT in 1979 (57.6%).
Table 5 provides a cumulative comparative summary of the Spring, 1979 and Spring, 1981 GCT performance data of high school students classified as emotionally disturbed. The data of Table 5 show a decrease of approximately five percent (5%) in the number of emotionally disturbed students failing one or both sections of the CCT in the Spring of 1981 (46.0%) as compared with those failing in the Spring of 1979 (51.5%).

The Virginia Department of Education, Division of Research, Evaluation and Testing (DRET), has proposed that the following factors may be responsible for the improved performance of handicapped students on the Spring, 1981 GCT:

<table>
<thead>
<tr>
<th>Testing Year</th>
<th>EDS Tested</th>
<th>EDS Passing CCT</th>
<th>EDS Passing Both Sections</th>
<th>EDS Failing One CCT Section</th>
<th>EDS Failing Both Sections</th>
<th>EDS Failing One or Both Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>190</td>
<td>48.9</td>
<td>20.0</td>
<td>30.1</td>
<td>51.1</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>187</td>
<td>54.0</td>
<td>18.2</td>
<td>27.9</td>
<td>46.0</td>
<td></td>
</tr>
</tbody>
</table>

*Constructed from Commonwealth of Virginia 12, 1981, Table 5.
**Passing one CCT section in Commonwealth of Virginia 12, 1981, Table 5, equivalent to % failing one CCT section.

EDS - Emotionally Disturbed Students.
1. In general, teachers are directing their instruction more specifically to the skills measured by the tests.

2. School personnel are becoming more skilled in identifying students at risk of failing the tests and are providing special instructional activities for them (Commonwealth of Virginia 12, 1981, p. 3).

However, no data are presented to support the contention that either of these factors have actually had a verifiable impact upon the CCT performance of handicapped students. Furthermore, the data of Table 6, which were drawn from DRET computer records of the performance of handicapped students on the March, 1981 administration of the CCT, indicate that of the 2510 handicapped students who took one or both sections of the CCT only 178 (7%) passed the reading section of the CCT and 503 (21%) passed the math section of the CCT. The data indicate that not a single handicapped student passed both sections of the March, 1981 CCT.

<table>
<thead>
<tr>
<th>Total Handicapped Students Tested</th>
<th>Pass Reading-CCT</th>
<th>Pass Math-CCT</th>
<th>Pass Reading-CCT and Math-CCT</th>
<th>Fail Both CCT Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>2510</td>
<td>178 (7%)</td>
<td>503 (21%)</td>
<td>0</td>
<td>2232</td>
</tr>
</tbody>
</table>

Table 6
Pass-Fail Performance of Handicapped Students March, 1981 CCT
Significance of the Study

The significance of this study is derived from the lack of data pertaining to the extent to which the specific reading and mathematics skills assessed by the GCT can be documented as being incorporated into the educational programs of handicapped high school students in Virginia.

The literature on the topic of minimum competency testing and the handicapped to date has focused upon examining the protection of individual rights (Baratz, 1979; Lewis, 1979; McClung and Pullin, 1978; Safer, 1980), test modifications (Morrissey, 1979) and the awarding of diplomas (NASDSE, 1979; Rosewater, 1979; Smith and Jenkins, 1980) as specific issues of concern with respect to state mandated MCT programs and handicapped students (Olsen, 1980). A systematic examination of the relationship between the performance of handicapped students on the skills assessed by state mandated minimum competency tests and the MCT skills content of the annual goals and short-term objectives of the IEPs of handicapped students has yet to be reported (Linde and Olsen, 1980; Rosewater, 1979).

This study provides a data base for examining current policies and practices regarding the relationship between the Virginia GCT and the content of the annual goals and short-term instructional objectives of the IEPs of handicapped high school students in Virginia. The finding of this study may have policy implications for all states having or contemplating the implementation of MCT programs.
Limitations of the Study

This study was limited to an examination of the 1980-1981 and 1981-1982 IEPs of tenth (10th), eleventh (11th), and twelfth (12th) grade high school students who were classified as either learning disabled (LD) or emotionally disturbed (ED) and who failed one or both sections of the March, 1981 OCT. Students classified as LD and those classified as ED comprise the second largest handicapped student group which participated in the CCT program during March of 1981.

Computer records provided by the Division of Research, Evaluation and Testing (DRET) of the Virginia Department of Education (DOE) indicated that a total of 760 LD and ED high school students (641 LD + 119 ED) took the March, 1981 CCT. In many Virginia school divisions (78 of 91) fewer than ten LD or ED students were tested. As a practical method of selecting a sample population and ensuring representation of the LD and ED students who were tested in each division, a process of blind choice was utilized in selecting a total of 456 students (406 LD + 50 ED) to serve as a sample population. The following criteria for the selection of the sample population were applied in the blind choice process:

1) students were classified as LD or ED for the March, 1981 CCT; and

2) students had failed at least one section of the March, 1981 CCT.

This process may have introduced an unknown bias for the sample population and may be viewed as an additional limitation of the study.
Definition of Terms

For the purpose of this investigation the following definition of terms will be utilized:

**Minimum competency test (MCT).** Refers to tests and testing programs mandated to assess the educational skills of students for the purpose of making mastery-non-mastery decisions regarding student competence in specified educational skills.

**Handicapped students.** Those students who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or having specific learning disabilities, who because of these impairments need special education and related services (Commonwealth of Virginia 10, 1978, p. 32).

**Special education.** Specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a handicapped child, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions (42 Federal Register 42474, 42480, 1977).

**Learning disabled students.** Those students who have been diagnosed as exhibiting a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell,
or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps or mental retardation, or emotional disturbance, or of environmental, cultural or economic disadvantage (42 Federal Register 42474, 7247EJ, 1977).

Emotionally disturbed students. Those students who have been diagnosed as exhibiting one or more of the following characteristics over a long period of time, to a marked degree and adversely affecting educational performance:

1. An inability to learn which cannot be explained by intellectual, sensory, or health factors;
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
3. Inappropriate types of behavior or feelings under normal circumstances;
4. A general pervasive mood of unhappiness or depression;
or
5. A tendency to develop physical symptoms or fears associated with personal or school problems.

The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally

**Individualized education program (IEP).** A written statement for each handicapped child developed in any meeting by a representative of the local education agency or an intermediate educational unit who shall be qualified to provide, or supervise the provision of, specially designed instruction to meet the unique needs of handicapped children, the teacher, the parents or guardian of such child, and whenever appropriate, such child, which statement shall include:

1. A statement of the child's present levels of educational performance;
2. A statement of annual goals, including short-term instructional objectives;
3. A statement of the specific special education and related services to be provided to the child and the extent to which the child will be able to participate in regular educational programs;
4. The projected dates for initiation of services and the anticipated duration of the services; and
5. Appropriate objective criteria and evaluation procedures and schedules for determining on at least an annual basis, whether the short-term instructional objectives are being achieved (Commonwealth of Virginia 5, 1978, Glossary, p. 5).

**Annual goals.** Statements which describe what a handicapped
student can reasonably be expected to accomplish within one
calendar year in his/her special education program (Commonwealth

**Short-term instructional objectives.** Measurable, intermediate
steps between a handicapped student's present level of
educational performance and the annual goals that are
established for the student (Commonwealth of Virginia II, 1981,
p. 33).

**Local educational agency (LEA).** The school division or other
agencies responsible for providing educational services to
handicapped children (Commonwealth of Virginia 5, 1978, Glossary,
p. 5).

**Chapter Summary**

During the past decade approximately 36 states have mandated
minimum competency testing (MCT) programs as a means of restoring
confidence in both the quality of public education and in the achieve-
ment symbolism of the high school diploma. The Commonwealth of
Virginia is among those states which have linked the awarding of a
standard high school diploma to satisfactory student performance on
a uniform statewide test of student competence in basic educational
skills.

However, concerns have been expressed as to whether handicapped
students are being provided meaningful opportunities to benefit from
the instruction which is necessary for the development of minimal
proficiency in the skills assessed by state and local MCT programs.
The Virginia Department of Education (DOE) has proposed that special education teachers in Virginia are directing instruction to the skills assessed by the GCT program and are providing special instructional activities for those students identified as at risk of failing the GCT. However, the DOE has presented no data which verify such a contention. Furthermore, a systematic examination of the relationship between the skills assessed by MCT programs and the content of individualized education programs (IEPs) designed for handicapped students has yet to be reported in the professional literature.

This study will provide DOE and local educational agency personnel in Virginia with data pertaining to the relationship between the GCT and the IEP. As a consequence, this study will provide a basis for a critical review of policies governing the relationship between the GCT and the educational objectives of the IEPs designed for handicapped high school students in Virginia.
Chapter II

Review of the Literature

The rationale for an examination of the relationship between the Virginia Graduation Competency Test (GCT) and the specific GCT skills content of the IEPs of handicapped high school students in Virginia is drawn from several sources:

1) the professional literature on minimum competency testing and the provision of individualized educational programs for handicapped students;

2) the rules and regulations of the federal legislation of section 504 of Public Law 93-112, the Rehabilitation Act of 1973 and Public Law 94-142, the Education for All Handicapped Children Act of 1975;

3) documents of the Commonwealth of Virginia which pertain to special education programs and minimum competency testing of handicapped students; and

4) recent court rulings and state administrative actions related to minimum competency testing and the minimum competency testing of handicapped students.

A review of the literature in these areas is presented in four related sections.

Section One will summarize the professional literature on minimum competency testing (MCT) in outlining the major factors which have influenced the emergence of state MCT legislation and will
provide a brief description of the general characteristics of MCT programs in the states. The major issues associated with minimum competency testing and minimum competency testing of handicapped students will be reviewed in Section Two. Section Three will trace the development of the current program of minimum competency testing in the Commonwealth of Virginia. Guidelines for the minimum competency testing of handicapped students in Virginia will be examined in Section Four.

Section One: The Emergence of Minimum Competency Testing (MCT) Programs in the States

Haney and Madaus (1978) view the MCT movement as an extension of the "measurement approach to educational management (p. 47)"
initiated in the United States during the mid-1800's. Resnick (1980) suggests that the MCT movement may be traced to the district level testing movement which originated during the late 1890's and influenced the eventual "entrenchment (p. 14)" of educational testing in American public schools. Wise (1979a), however, contends that the historical origin of the impetus for the current state legislation of MCT programs can be traced most directly to the action of the Supreme Court in the case of Brown v. Board of Education of Topeka, Kansas (347 U.S. 483 [1954]). Wise (1979a) maintains that the action of the Supreme Court in basing its decision in Brown (1954), in part, upon evidence derived from psychological assessments of the harmful impact of segregated school programs on black students, implicitly legitimized the utilization of educational test results.
as a measure of the quality of educational programs. As a consequence, Cohen and Haney (1980) and Wise (1979a) contend that assessment of student achievement was readily adopted throughout the states as the primary method of evaluating student access to educational programs of acceptable quality.

The adoption of assessment of student achievement as the primary method of evaluating the quality of school programs after Brown (1954), was also influenced by a shift in federal social policy (Cohen and Haney, 1980; Wise, 1979a). During the 1960s the federal social policy emphasis upon delivery of resources (inputs) as a means of assuring equality of opportunity shifted with the enactment of federal Civil Rights legislation to an emphasis upon securing measurable results (outcomes) upon which to evaluate the quality of the opportunity provided by social programs (Cohen and Haney, 1980; Wise, 1979a). The impact of this shift upon education, Wise (1979a) maintains, has been that the "ideal of equality of opportunity (in education) has tended to be replaced by the concept of an adequate level of achievement (p. 3)." Wise (1979a) and Resnick (1980) cite the federal emphasis upon improving student achievement scores as the primary goal (outcome) of federally supported educational programs as having been highly influential in the emergence of state mandated MCT programs.

The federal emphasis upon assessment of student achievement was initially introduced through Section 205(a) (5) and (6) of Title I of Public Law 89-10 (P.L. 89-10), the Elementary and Secondary Education Act of 1965 (ESEA) which focused attention on student
enhance the quality of educational opportunity (Cohen and Heany).

upon improvement of student achievement at the primary means of
provided momentum to local level adoption of the federal emphasis
and it is proposed that the impact of the report resulted and
of adding resource 

achievement outcomes. The 

teachers challenged the practices

facilities (upward), as were unrelated to differences in student

the report concluded that differences in school resources and

opportunities in public schools throughout the nation. The authors of

the passage of P.L. 89-10, examined the quality of educational

(Cohen Report). The report, which was published shortly after

understood by the breadth of educational opportunity system of 1965

initially embedded in Section 205 of P.L. 89-10, were implicitly

The federal emphasis upon assessment of student achievement as

scores.

quality with documented improvement in student achievement trend

and the quality of educational programs by assessing effectiveness

the 1965 ESEA was to improve the “effectiveness” (Cohen, 1974, p. 8)“

propose that the focus of the systemic evaluation research on

p. 20). In effect, Wise (1979) and Neuschatz (1979) appear to

student achievement (United StatesStrategies 79, P.L. 89-10, 1965).

effectiveness of federally supported educational programs in improving

objective measurement of educational achievement” as a measure of the

required the states to develop and maintain programs of “appropriate

performance (Bruner, Campbell, and Schneider, 1972). Section 205
In effect, the Coleman Report is viewed as having served to establish assessment of student achievement as the preferred method of evaluating the quality of school programs (Wise, 1979a; Mosteller and Hoynihan, 1972). The inclusion of the systematic evaluation requirement of the 1965 ESEA in the ESEA amendments of 1966 (P.L. 89-750), 1967 (P.L. 90-247) and 1970 (P.L. 91-123) is indicative of a federal commitment to the concept of assessment of student achievement as the appropriate measure of the quality of school programs.

Objective measurement of student achievement on the scale required for compliance with Section 205 of Title I, in many instances, necessitated the creation, or, major reorganization of state educational research divisions (Resnick, 1980). The states were assisted in meeting the requirements for such action through the funding provisions of Title V of the 1965 ESEA (Resnick, 1980).

Technologically, the states were assisted in the development of materials and methodologies for meeting the assessment requirements of Section 205 of Title I through the resources of the federally underwritten National Assessment of Educational Progress (NAEP) (Resnick, 1980; Wise, 1979a; 1978). The development of technologies for measuring changes in educational achievement on a national scale and facilitating the adaptation of such technologies for use on state and local levels is a major objective of the NAEP (Carpenter, Coburn, Reys and Wilson, 1978). As an example of the extent of the NAEP's influence upon the technological development of state educational assessment materials and methodologies, Wise (1979a) cites Tyler
(1975) as noting that by 1975 thirty-six states had incorporated materials and procedures utilized by the NAEP into their own educational assessment programs.

The impact of the shift in federal educational policy to an emphasis upon student achievement is also reflected in the general theme of state educational accountability legislation enacted during the 1960's and the 1970's (Baratz, 1980; Bruno, Campbell and Schabacker, 1972; Cohen and Haney, 1980; Wise, 1979a,b). Essentially, accountability legislation mandated the adaptation of a variety of data-based management systems to educational program planning and evaluation (Milliken, 1971; Tyler, 1971; Wynne, 1972). The underlying philosophy of the accountability legislation as stated by Haney and Madaus (1978) was that "more systematic management of education (would) improve educational results (p. 473)."

Competency-based education (CBE), performance contracting, program evaluation, and planning, programming, budgeting systems (PPBS) are examples of the variety of the adaptations of data-based management systems which were fostered through the auspices of state educational accountability legislation (Wise, 1979a,b; 1978). It has been theorized that these programs operationalized an educational policy shift at the state level to an increased emphasis upon program outcomes (Haney and Madaus, 1978; Tractenburg, 1977; Wise, 1979a,b). Resnick (1980) and Wise (1979a) contend that the experience which states gained in developing and implementing such programs has been influential in the adoption of current state MCT legislation (Wise, 1979a).
Litigation and legislation arising from constitutional equal protection challenges to state school finance systems are also viewed as major factors which have influenced the development and adoption of state MCT legislation (Resnick, 1980; Wise, 1979a,b; 1978). Rodríguez v. San Antonio Independent School District (337 F. Supp. 280 [W.D. Tex. 1971]) and Robinson v. Cahill (303 A. 2d [1973]) are viewed as litigation which has been particularly influential in the emergence of state MCT programs.

In the Rodríguez case (337 F. Supp. 280 [W.D. Tex. 1971]) plaintiffs argued that the Texas state school finance plan, which favored higher expenditures in wealthier districts, violated the Equal Protection Clause of the Fourteenth Amendment on the grounds of the inequality of the educational opportunity financed for students in the poorer districts. Although this argument was initially affirmed at the district court level, the Supreme Court in 1973 (93 S.Ct. 1278 [1973]) ruled 1) "the Equal Protection Clause does not require absolute equality or precisely equal advantages (p. 1291)" and 2) no fair charge could be made that the Texas system failed to provide each child with "an opportunity to acquire the basic minimal skills necessary (p. 1299)" for the fundamental exercises of the rights of citizenship. Wise (1979a) contends that this ruling of the Supreme Court legitimized the concept of achievement in basic skills as the outcome standard for public educational programs.

In a similar challenge, the Superior Court of New Jersey, in
Robinson (287A. 2d 187 [1972]), ruled that the New Jersey system of school finance, which provided for unequal expenditures in favor of wealthier districts, denied students the equal protection guarantees of both the state and the federal constitutions. The New Jersey Supreme Court affirmed the Superior Court decision that plaintiffs had been denied equal protection. However, the state supreme court linked the denial of rights to the educational clause of the state constitution which required the maintenance and support of a "thorough and efficient" system of free public schools (303 A. 2d 273, 291 [1973]). The New Jersey Supreme Court expressed its interpretation of a "thorough and efficient" system of public education in the following manner.

Today, a system of public education which did not offer high school education would hardly be thorough and efficient. The Constitution's guarantee must be understood to embrace that educational opportunity which is needed in the contemporary setting to equip a child for his role as a citizen and as a competitor in the labor market (303 A. 2d 273, 295 [1973]). The New Jersey Legislature acted to comply with this interpretation with respect to the provision of a "thorough and efficient" system of public education by mandating a program of statewide assessment of basic educational skills through the Public School Education Act of 1975 (Wise, 1979a).

The decision of the New Jersey Supreme Court in Robinson v. Cahill (303 A. 2d 273 [1973]), which was rendered just thirteen days
after the U.S. Supreme Court's action in Rodriguez (1973), and the subsequent compliance legislation enacted by the New Jersey legislature are viewed by Resnick (1980) and Wise (1979a) as catalysts in the emergence of the legislation of basic skills testing programs in the states.

The case of Peter W. v. San Francisco Unified School District (60 C.A. 3d 814 [1976]: 131 Cal. Rptr. 854 (Ct. App. 1979), originally filed as Doe v. San Francisco Unified School District, is also viewed as having been influential in the emergence of MCT legislation in the states (Riegel and Lovell, 1980). In this case, which was the very first educational malpractice suit to be brought against a public school district, a former California public school student claimed that his low level of proficiency in basic educational skills was a result of the negligence on the part of school authorities (Tractenberg, 1977). Although the court found no fault with the educational and administrative practices of the school district, the case stimulated a widespread re-evaluation of public policy with respect to the legal concept of the "duty of care" in public education. This re-evaluation contributed to the development of the concept of MCT programs as a "fail-safe mechanism (Riegel and Lovell, 1980, p. 7)" for preventing future legal challenges to the effectiveness and quality of public school programs.

Although the judicial and legislative decisions arising from Rodriguez (1973) and Robinson (1973) and the impact of Peter W. (1976) are considered distinct judicial, legislative and political
factors which have influenced the emergence of state MCT legislation
(Resnick, 1980; Wise, 1979a), they are not viewed as having been
influential in isolation from other socio-economic factors. The
national economic decline of the 1970's, the related increase in
unemployment among the nation's youth and the drop in SAT scores
during the late 1960's and early 1970's, in particular, are also cited
as factors which have contributed to the emergence of MCT legislation
in the states (Baratz, 1980, 1978; Carter, 1979b; Clark and Thomson,
1976; Elam, 1977; Fisher, 1978; Glass, 1979; Resnick, 1980;
Shoemaker, 1980).

The well documented and highly publicized decline in SAT scores
has perhaps been most clearly influential in spurring the adoption
of state MCT legislation (Clarke and Thomson, 1976; Riegel and
Lovell, 1980; Smith and Gallup, 1977). Essentially, the lower SAT
scores were generally interpreted as tangible evidence of a decline
in emphasis upon basic skills in reading and mathematics (Ebel,
1976; Hawkins, 1978; Pinkney and Fisher, 1978; Smith and Gallup,
1977). The perceived decline in the quality of public education
associated with the decline in SAT scores, in turn, generated
public skepticism regarding the value of the high school diploma
(Baratz, 1980; Carter, 1979a,b; Clark and Thomson, 1976; Haney and
Madaus, 1979; Hawkins, 1978; Lessinger, 1979; Lewis, 1979; National
School Boards Association, 1978; Pinkney and Fisher, 1978; Pullin,
1980; Riegel and Lovell, 1980; Resnick, 1980; Taylor, 1978; Wise,
1979b). Smith and Gallup (1977) contend that the desire to restore
some measure of public confidence in the value of the high school
diploma is the major basis of support for requiring high school students to pass an MCT to be eligible for a high school diploma. In this respect, Haney and Madaus (1978) and Kean and Mattleman (1979) view the MCT movement as an extension of the back-to-basics movement while Riegel and Lovell (1980) view it as an extension of the accountability movement.

Although the interpretation that the decline in SAT scores reflects a decline in the basic educational skills of high school students is suspect (Brandt, 1981; Cawelti, 1978; Farr and Olshansky, 1980; Glass, 1979; Haney and Madaus, 1978; Jencks, 1978; Madaus, 1981; Riegel and Lovell, 1980; Rogers and Baron, 1979), the strength of the influence of such an interpretation is apparent in the provisions of MCT legislation in seventeen states which link the award of a standard high school diploma, in some fashion, to student performance on an MCT (Carter, 1979b; Clark and Thomson, 1976; Cohan and Haney, 1980; Deane and Walker, 1978; Ebel, 1978; Hawkins, 1978; Jencks, 1978; Pullin, 1978; Resnick, 1980; Shepard, 1980).

The primary assumptions underlying the concept of minimum competency testing may be briefly summarized as follows:

1) operationalizing educational objectives in behavioral terms will enhance the teaching-learning process and lead directly to improved student performance on tests of achievement;

2) the process will restore confidence in public education and in the achievement symbolism of the high school diploma; and,

However, there are several major concerns regarding the MCT concept as it is currently implemented. These concerns include the:

1) political basis and coercive nature of the programs (Haney and Madaus, 1978; Loheyde, 1979; Madaus, 1981; Mecklenberger, 1978; Nell, 1979; Ross, 1981; Strike, 1977; Wise, 1979b);

2) inadequacy of the present technology of educational testing for establishing satisfactory test validity and reliability for certifying student competence for graduation or employment (Haney and Madaus, 1978; Impara, 1978; Lynch, 1979; McClung, 1978; Shepard, 1980);

3) questionable relationship between school performance and future employment, job performance and earnings as a basis for MCT programs (Eckland, 1980; Heath, 1980; Jaeger and Tittle, 1980; Nathan and Jennings, 1978; Page, 1980; Sticht, 1980);

4) related issues of "minimums becoming maximums" and "teaching to the test" (Baron and Sergi, 1979; Riegel and Lovell, 1980; Shoemaker, 1980; Popham, 1981b);
5) potential for discrimination on the basis of race and/or handcap condition (Baratz, 1980; Brown, 1979; McClung and Pullen, 1978; Morrissey, 1979; Riegel and Lovell, 1980; Scott, 1979; Shoemaker, 1980; Wise, 1979b);

6) possible stigmatizing impact of test failure (Baratz, 1980; Baron and Sergi, 1979; Cohen and Haney, 1980);

7) arbitrary subjectivity and political considerations inherent in establishing MCT pass/fail cut-off scores (Airasian, Madaus and Pedulla, 1978; Glass, 1979; Glass, 1979; Haney and Madaus, 1978; Shepard, 1980); and

8) apparent lack of planning and financial support for remedial programs for students who fail the tests (Baratz, 1980; Cohen and Haney, 1980; Haney and Madaus, 1978).

Despite such concerns, as of January 1, 1981, MCT programs have been mandated through legislative statute or adopted through state board of education administrative action by 36 states and the District of Columbia (Gorth and Perkins, 1979b; Lewis, 1979; Phipho, 1980a, b, c). In addition, programs which are similar to MCT state legislated programs may be found at the local level in each of the 50 states (Strang, 1981).

Lewis (1979) and Riegel and Lovell (1980) have characterized the theme of the current MCT legislation in the states as reflecting a position that:

1) the states have a duty to establish basic skills proficiency standards;
2) testing is the most practical means of assessing whether proficiency standards have been achieved; and

3) testing programs provide a feasible mechanism for the assessment of educational program effectiveness.

Generally, the proposed intent of state and local MCT programs encompass:

1) assurance that students master specified basic skills;

2) identification of students in need of remedial programs;

3) clarification of curriculum content; and

4) introduction of greater accountability into the management of public education (Gorth and Perkins, 1979b; Riegel and Lovell, 1980; Tractenberg, 1977).

Although the structure and administrative details of MCT programs vary considerably among the states (Deninger, 1979; Gorth and Perkins, 1979b; Pipho, 1980a,c; Shoemaker, 1980; Strang, 1981), the basic design of state MCT programs include:

1) specifications of a set of skills to be mastered;

2) requirements for testing to assess the levels of individual student competence in the specified skills;

3) specification of a minimum performance score for certification of competence;

4) remediation, promotion and/or graduation linked to students' performance on uniform statewide assessment measures (Baratz, 1980; Lewis, 1979; Linde and Olsen, 1980; Pipho, 1980a,c; Riegel and Lovell, 1980; Rosewater, 1979).
As currently implemented, state MCT programs may be divided into three general categories:

1) programs with uniform statewide standards and instruments;
2) programs with local standards and instruments; and
3) programs with state standards and instruments, and local option of participation (Baratz, 1980; Gorth and Perkins, 1979b; Phipo, 1980a; Riegel and Lovell, 1980).

The term "minimum competencies" refers, essentially to educational skills which are considered necessary for successful progress in school and for adequate functioning in adult society (Haney and Madans, 1978). The skills assessed by most state MCT programs are school skills in reading, composition and mathematics (Brickell, 1979; Gorth and Perkins, 1979b; Lewis, 1979; Linde and Olsen, 1980; Shepard, 1980; Trachtenburg, 1977). Skills in these areas are defined and assessed, generally, as basic skills or as functional skills.

Basic skills are usually defined in terms of educational facts and abilities in reading and mathematics, which are considered prerequisites for application in simple problem solving. Knowledge of multiplication facts and simple word recognition are examples of the concept denoted by the term basic skills.

The functional skills generally denote application of knowledge of basic skills in more complex situational problem solving. Student reading ability and application of knowledge of multiplication facts to solve the problem "How many bricks are in seven rows of bricks, if each row has six bricks?" is an example of
the concept of functional skills.

Basic skills and some lower level functional skills are usually assessed in the elementary and middle grades. Functional skills are assessed primarily in the secondary grades (Linde and Olsen, 1980).

A few state MCT programs also require assessment of skills which are described as survival or life skills (Baratz, 1980; Haney and Madaus, 1978; Savage, 1978; Spady, 1978; Taylor, 1978). These skills, which require students to apply basic and functional skills in adult-rule problem solving situations, such as completing a credit application and balancing a checkbook (Gorth and Perkins, 1979b), for most practical purposes, may be classified as functional skills.

Essentially, an MCT is a test which is designed to determine whether a student can demonstrate a desired level of performance with respect to specified basic or functional skills (Hambelton and Eignor, 1980). The majority of state MCT programs require pencil-and-paper multiple choice tests to assess student competence (Baratz, 1980; Gorth and Perkins, 1979b; Haney and Madaus, 1978). MCT paper-and-pencil tests assess the level of student competence indirectly and are viewed as advantageous in that they are inexpensive to administer and to score (Haney and Madaus, 1978).

MCTs are usually designed to combine the conceptual, technical and methodological characteristics of both criterion-referenced tests (CRTs) and subject area mastery tests (Linde and Olsen, 1980; Shepard, 1980). The concept of CRTs was introduced by Glaser (1963) as an alternative to traditional norm-referenced testing for monitoring
student progress and evaluating instructional effectiveness of objectives-based school programs (Hambelton, 1980; Hambelton and Novick, 1974; Shepard, 1980; Trow, 1971). CRTs are designed to reflect specific performance objectives and to assess the extent to which an individual student has attained a desired standard of performance for the objectives-referenced items of the test (Glaser, 1963; Popham, 1978). A major characteristic of CRT data is that it can be useful in providing direction in the planning of daily instruction (National Academy of Education, 1978; Shepard, 1980; Wallace and Larsen, 1978).

Subject area mastery tests, which apply an absolute or cut-score standard to a continuum of desired student performance, usually defined in terms of a percent of correct responses, are designed to indicate the level of mastery of an individual student's performance with respect to the material tested (Berk, 1980; Bloom, 1971; Ebel, 1982; Flanagan, 1951; Shepard, 1980). In adapting the methodology of CRTs to the pass-fail decision requirements of state MCT programs, the scoring procedure has been modified to produce the absolute cut-score standard associated with testing for mastery in academic content areas (Subkoviak, 1978). This scoring modification does not alter the utility of the construction or the characteristics of criterion-based tests as measures of student proficiency in basic skills areas (Gorth and Hambelton, 1972; Millman, 1974; Nitko, 1974; Shepard, 1980). The adaptation of the cut-score standard to the CRT format allows
recording and reporting of student performance in terms of the proportion of correct responses for each set of the content-referenced items assessed by the test. Such a scoring procedure provides a fairly clear indication of what the student can and cannot do with respect to the specific skills assessed by the test (Glaser and Nitko, 1971; Shepard, 1980).

In contrast, norm-referenced tests (NRTs) which include most standardized tests of achievement (Popham and Husek, 1969) are constructed to provide an indication of a student’s relative standing in comparison with the performance of other students on the same test (Burns, 1979; Popham and Husek, 1969; Sax, 1974; Shepard, 1980). The construction and scoring format of NRTs provide little or no specific diagnostic information regarding the level of an individual student’s proficiency regarding a specific academic skill or content area (Glaser, 1963, Hambelton and Novick, 1973). NRTs are designed to measure and report an individual student’s performance in terms of percentile rank, standard scores or grade equivalent score. In effect, the importance of learning a specific educational skill in an academic content area for an NRT is limited to the assistance that such learning provides in facilitating the rank ordering of students in terms of the number of skills learned (Ysseldyke and Salvia, 1978).

In short, as a consequence of the differences in the purpose, design and scoring of criterion-referenced tests and norm-referenced tests, criterion-referenced tests are viewed as providing a more practical, and relevant description of an individual student’s proficiency in

As a result, many MCT states have developed their own CRT-based instruments or have found such commercially available CRT-type tests as the Senior High Assessment of Reading Performance (SHARP), the Test of Proficiency in Computational Skills (TOPCIS) and the California Test of Basic Skills (CTBS) readily adaptable or acceptable for use as assessment instruments for their MCT programs (Gorth and Perkins, 1979b; Haney and Madaus, 1978; Shepard, 1980).

Formative evaluation and summative evaluation are the two major categories of classification of the application of state MCT programs (Linde and Olsen, 1980). MCT programs designed to provide data for decision making to improve ongoing programs or to initiate the provision of diagnostic and remedial services for individual students are classified as formative evaluation programs. State competency testing programs designed to provide data for judgements primarily concerning program outcomes, promotion and graduation are classified as summative evaluation programs. Many state MCT programs incorporate both designs for both applications (Linde and Olsen, 1980).

Approximately two-thirds of the state MCT programs currently in operation require testing of both elementary and secondary school students while the remaining programs require testing of either elementary school students or secondary school students (Gorth and Perkins, 1979b; Linde and Olsen, 1980; Popho, 1980a,b,c). Student
MCT performance is linked to remedial programming in approximately 19 states, although provisions for remedial programs are actually mandated in only nine states (Gorth and Perkins, 1979a,b; Lewis, 1979; Pipho, 1980a,b,c). Graduation is linked to student MCT performance in at least 17 states. In only six states, however, are MCT standards for the awarding of a high school diploma currently in effect (Gorth and Perkins, 1979a,b; Pipho, 1980a,b,c).

MCT performance results are entered into students' permanent records and students, parents and teachers are informed of the test scores. MCT data which are purged of individual student identification are reported to State Boards of Education and are generally made available to the media as a matter of public record (Gorth and Perkins, 1979b).

Although education is viewed as an essential concern at the federal level (Loheyde, 1979), efforts to secure direct federal involvement in the MCT movement have been relatively limited and somewhat restrained (Loheyde, 1979; Shoemaker, 1980). The current indications from the federal level are that a federally developed or supported basic skills testing program is not anticipated (Loheyde, 1979; Riegel and Lovell, 1980; Shoemaker, 1980). At present, federal activity with regard to minimum competency testing is limited through the Education Amendments of 1978 (Public Law 95-561) to:

1) financial grants for support of state and local programs designed to assist students to improve educational pro-
ficiency in basic skills;

2) technical assistance from the Department of Health, Education and Welfare (HEW) to state and local educational agencies for developing capacities for assessing basic skills achievement; and,

3) research related to the long-term impact of state MCT programs (Riegel and Lovell, 1980; Shoemaker, 1980).

Generally, the MCT movement has been more widely accepted in the western, southern and eastern regions of the nation in states which have traditionally supported strong central state control over education (Pipho, 1980c). The MCT concept has not been widely adopted in the midwestern states (Pipho, 1980c).

Although action with respect to the development of MCT programs in states which had not legislated such programs prior to 1978 has diminished somewhat, it appears that interest in the MCT concept remains high. It is anticipated that further state legislative action with respect to the development of new MCT programs will slow considerably during the next several years as states critically evaluate the many aspects of current approaches to the operationalization of the MCT concept (Pipho, 1980c; Riegel and Lovell, 1980).

Summary

The emergence of state MCT legislation has evolved from the interaction of a number of complex and interrelated social and political factors. In general, state MCT legislation has been enacted as a means of restoring confidence in the quality of public education.
Although the details of the administrative provisions and structure of MCT programs vary, most state and local MCT programs specify a set reading and mathematic skills and require students to demonstrate an acceptable level of proficiency in these skills through a uniform statewide criterion-referenced test. Remediation, grade-to-grade promotion and the awarding of diplomas and certificates may be linked to students' MCT performance.

Critics of the MCT movement contend that the design of state and local MCT programs is based upon faulty assumptions and inadequate technology and, as a consequence, maintain that MCT programs are fraught with serious and, as yet, unresolved technical, ethical and legal problems.

At present, it appears that the MCT movement has reached a plateau as states evaluate the concept, operation and impact of current state and local minimum competency testing programs.
Section Two: Major Current Issues in the Minimum Competency Testing Movement

It appears that those states which have implemented MCT programs have resolved, to their satisfaction, the following issues which were considered problematic in the early stages of the operationalization of the MCT concept:

1) determination of the purpose of MCT programs;
2) delineation of the responsibility for setting standards;
3) defining the competencies to be measured;
4) determination of the method of assessment;
5) development of a schedule of assessment; and
6) establishment of acceptable minimum performance levels


However, there are several major technical and related legal issues which have, as yet, not been clearly resolved in the implementation of state and local MCT programs. These issues include the:

1) adequacy of the curricular and instructional validity of state minimum competency tests;
2) protection of students' rights;
3) relationship between state MCT programs and the award of a standard high school diploma; and
4) testing of handicapped students (Carter, 1979b; Denninger, 1979; Kean and Matheman, 1979; Lewis, 1979; Linde and Olsen, 1980; Mahon, 1980; McClung and Pullin, 1978; Morrissey, 1979; Rosewater, 1979; Ross and Weintraub, 1980; Shepard, 1980; Trachtenburg, 1977).

Shepard (1980), in a comprehensive examination of the technological issues involved in the construction and utilization of minimum competency tests, has concluded that the current technology of educational test construction is inadequate for achieving satisfactory test validity for the purpose of certifying student competency for high school graduation. McClung and Pullin (1978), staff attorneys of the Harvard University Center for Law and Education have also faulted the test validity of state and local MCTs. These authors define curricular validity as "a measure of how well test items represent the objectives of the curriculum (p. 397)" and define instructional validity as "a measure of whether school programs provide students with instruction in the knowledge and skills measured by a test (p. 397)." McClung and Pullin (1978) cite the questionable curricular and instructional validity of minimum competency tests as a potential basis for due process and equal protection challenges of current state MCT programs.

It may be argued that the 1981 ruling of the 5th U.S. Court of Appeals in the Florida case of Debra P. v. Turlington (644 F. 2d 397 [1981]), the first major legal challenge of the constitutional and statutory validity of a state mandated minimum competency test
program, has legitimized the concepts of curricular and instructional
test validity as issues of significance with respect to the protection
of students' rights to due process and equal protection in state
MCT programs. In the Debra P. (1981) class action suit, non-handi-
capped black student plaintiffs-appellees challenged the constitutionality
of the Florida State Student Assessment Test, Part II (SSAT II). The
students claimed that the test violated the due process and equal pro-
tection clauses of the Fourteenth Amendment, the nondiscrimination
provisions of Title VI of the Civil Rights Act of 1964, 42 U.S.C. §
2000d (1976) and the provisions of the Equal Educational Opportunities

Briefly, the Debra P. challenge contended that the state had
implemented a racially biased testing program because remedial
classes for students who failed the test tended to contain substantially
more black than white students. The challenge maintained that the test,
in effect, constituted a device for resegregating Florida's public
schools (644 F. 2d 397, 401 [1981]). The suit further contended that
the state's notice of the implementation of the SSAT II was insufficient
to allow them adequate preparation to meet the new requirements and,
as a consequence, the diploma sanction of Florida's SSAT II program
violated the due process clause of the Fourteenth Amendment.

In considering the charge of a violation of equal protection the
Debra P. (1981) court examined evidence which indicated that the state
was aware of the possibility that more black students than white
students would fail the test. The state conceded that such a situation
might be attributed to the "unequal education" which black students received under the prior segregated system of "dual schools" (644 F. 2d 397, 407 [1981]). Furthermore, the court noted that the state had failed to demonstrate prior to the hearing that the disparate failure rate of black students was not due to the effects of past segregation or that the diploma sanction, as implemented, was a necessary action to remedy such an effect. In ruling that the SSAT II program "perpetuated past discrimination" the court stated that the diploma sanction violated the Equal Educational Opportunity Act, 20 U.S.C. § 1703 (1976) which requires educational agencies to take affirmative action to "remove the 'vestiges' of dual school systems (644 F. 2d 397, 401 [1981])," and the court concluded that "immediate use of the diploma sanction violated equal protection as punishing black students for vestiges of the prior dual school system (644 F. 2d 397, 398 [1981])."

In examining the due process challenge, the Debra F. (1981) court ruled that prior to the implementation of the SSAT II program the State of Florida had created an expectation in students with respect to the award of a high school diploma. The court maintained that this expectation satisfied the constitutional application of the concept of a property interest and affirmed the ruling of the original trial court (474 F. Supp. 244 [1979]) that the adequacy of the notice of the new SSAT II requirements for the award of a high school diploma was insufficient and violated due process (644 F. 2d 397, 404 [1981]).

With regard to the due process challenge in particular, the Debra
P. (1981) court considered the issue of the curricular validity of the SSAT II, that is, whether the test covered material actually taught in the classroom. Finding that the Florida Department of Education had failed to conduct any formal studies which indicated that the skills measured on the test were, in fact, taught in the schools, the court ruled that "fundamental fairness required that the state be put to the test on the issue of whether the students were tested on material they were or were not taught" and that "if the test is found to be invalid for the reason that it tests matters outside the curriculum, its continued use would violate the Equal Protection Clause (644 F. 2d 397, 406 [1981])." The court did indicate, however, that if the state test was found to be a fair test of what is taught in the Florida schools, its use as a graduation requirement would not violate either the Equal Protection Clause or Title VI of the Civil Rights Act (644 F. 2d 397, 408 [1981]). The Debra P. (1981) court also affirmed the earlier trial court ruling (474 F. Supp. 244 [1979]) that the use of the SSAT II for remediation purposes only would not violate federal or state constitutional or statutory provisions (644 F. 2d 397, 408 [1981]).

In effect, although the 5th U.S. Circuit Court of Appeals in Debra P. v. Turlington (644 F. 2d 397 [1981]) recognized the remediation and diploma denial aspects of minimum competency test programs as valid, substantial and legitimate state interests, the ruling of the court that the state of Florida:

may not deprive its high school seniors of the economic and
educational benefits of a high school diploma until it has demonstrated that the SSAT II is a fair test of that which is taught in its classrooms and that the racially discriminatory impact of the test is not due to the educational deprivation in the 'dual school' years (644 F. 2d 397, 408 [1981]).

has served notice that the courts are willing to examine challenges to state MCT programs which may violate students' rights to due process and equal protection. The "fundamental fairness" ruling of the Debra P. (1981) court also suggests that the concepts of curricular and instructional validity are applicable to state assessment measures and that curricular and instructional validity may be viewed as fundamental elements necessary for the protection of students' constitutional rights to due process and equal protection in situations in which the award of the high school diploma is linked to student performance on an MCT.

Although the issues of curricular and instructional validity and the disparate impact of a state's MCT program were examined in Debra P. (1981) on the basis of challenges initiated by non-handicapped students, the ruling of the court with respect to due process and equal protection violations arising from those issues is clearly applicable to the minimum competency testing of handicapped students. Furthermore, the major issues which have arisen in conjunction with the minimum competency testing of non-handicapped students are essentially the same issues which have emerged in the minimum competency testing of handicapped students. These issues include the:
1) protection of students' rights to due process and equal protection (Gillet, 1980; Kaluzny, 1979; Lewis, 1979; McClung and Pullin, 1978; Morrissey, 1979; NASDSE, 1979; Rosewater, 1979; Tractenberg, 1977);

2) adequacy of the curricular and instructional validity of MCT programs (McClung and Pullin, 1978; Riegel and Lovell, 1980);

3) provision of remedial programs for students who fail the tests (Baratz, 1980; Deninger, 1979; Gallagher and Ramsbotham, 1979; McCarthy, 1980; Rosewater, 1979; Safer, 1980; Smith and Jenkins, 1980); and

4) diploma sanction (Carter, 1979b; Lewis, 1979; Linde and Olsen, 1980; McClung and Pullin, 1978; NASDSE, 1979; Pullin, 1980; Rosewater, 1979; Ross and Weintraub, 1980; Safer, 1980).

The literature addressing minimum competency testing of handicapped students strongly suggests that these issues have emerged primarily as a result of the failure of the states to involve special educators in the development of MCT programs (Gillet, 1980; Linde and Olsen, 1980; NASDSE, 1979; Olsen, 1980; Pipho, 1978; Pullin, 1980; Rosewater, 1979; Safer, 1980; Smith and Jenkins, 1980). Thus, despite the contention that the federal mandates of Public Law 93-112, the Vocational Rehabilitation Act of 1973, Section 504, and Public Law 94-142, the Education for All Handicapped Children Act of 1975 (P. L. 94-142), respectively, provide the basis for the participation of handicapped students in state MCT programs and govern the protection
of the rights of handicapped students in such programs (Ewing, 1979; Fenton, 1980; Linde and Olsen, 1980; McCarthy, 1980; Morrissey, 1979; NASDSE, 1979; Riegel and Lovell, 1980; Rosewater, 1979), many MCT-states have not yet clearly resolved the details of their MCT programs with respect handicapped students in terms of the following issues:

1) exemptions from testing;
2) accommodations in testing;
3) the award of standard and/or differential diplomas;
4) the role of the IEP in the relationship between special education and state assessment programs; and
5) the provision of remedial programs for students who fail the tests (Ewing, 1979; Linde and Olsen, 1980; McCarthy, 1980; Morrissey, 1979; NASDSE, 1979; Rosewater, 1979; Ross and Weintraub, 1980; Smith and Jenkins, 1980).

Rosewater (1979), Gallagher (1980) and Grise (1980) have indicated, for example, that in several states some categories of mildly and severely handicapped students may currently be automatically excluded from participation in MCT programs. However, Smith and Jenkins (1980) have reported that in 25 MCT-states handicapped students are not excluded or excused entirely from competency test requirements as a criteria for the award of a standard high school diploma.

Generally, exclusion or exemption of handicapped students from MCT participation may apply to students in specific handicapped categories (Gallagher and Hall, 1979; Grise, 1980); may be based upon the nature of the student's program placement rather than the
student's disability (Rosewater, 1979); or, may be determined on an individual basis through the IEP process (Hull, Garvin and Withey, 1979; McClung and Pullin, 1978). Provisions for exempting handicapped students from participation in state MCT programs may be designed as an "opt in" (Grise, 1980) or an "opt out" (Commonwealth of Virginia 4, 1980) procedure, each of which provide a mechanism for ensuring that handicapped students have the opportunity to participate in the state's basic skills assessment program if they so desire.

It should be noted, however, that the exercise of the option to not participate in a state testing program may impose an automatic diploma sanction (Commonwealth of Virginia 4, 1980). In discussing exclusion of handicapped students from participation in MCT programs McClung and Pullin (1978) have suggested that automatic exclusion may constitute a denial of equal protection and due process. In contrast, Linde and Olsen (1980) have noted that automatic inclusion of handicapped students in state MCT programs may, on an individual basis, violate the P.L. 94-142 rights of handicapped students to protection in evaluation.

Vermont appears to be the only state which has established procedures for exempting individual handicapped students from specific competency skills on a case-by-case basis (Hull, Garvin and Withey, 1979) and Florida appears to be the only state which has implemented special standards and tests for certain categories of handicapped students (Fisher, 1978; Grise, 1980; Linde and Olsen, 1980). It has been suggested, however, that the use of different MCT standards for
handicapped students may provide a basis for reverse discrimination challenges (Morrissey, 1979). Furthermore, McClung and Pullin (1978) have warned that if different standards and tests are sanctioned with a different diploma such provisions may violate the equal educational opportunity provisions of Section 504 and P.L. 94-142.

The issue of providing handicapped students the opportunity to participate in state MCT programs, has, in turn, generated proposals for the provision of accommodations in testing procedures to protect the P.L. 94-142 rights of handicapped students to non-discriminatory testing (Amos, 1980; Ewing, 1979; Gillet, 1980; Hull, Garvin and Withey, 1979; McCarthy, 1980; Morrissey, 1979). Morrissey (1979) has staunchly argued for the provision of procedural accommodations in testing which would provide handicapped students an opportunity to accurately demonstrate their proficiency in the skills assessed. Essentially, proposals for procedural accommodations have focused primarily upon modifications in test administration rather than test content.

Although maintenance of test validity has been a primary concern in the accommodations issue (McCarthy, 1980; NASDSE, 1979), Greenberg (1980) has reported research which clearly documents that testing accommodations which may have a significant positive impact on the MCT performance of handicapped students need not infringe upon test validity. As the most practical means of protecting the P.L. 94-142 and Section 504 rights of handicapped students to non-discriminatory testing, many MCT-states have initiated action to establish some form to procedural accommodations for the minimum competency testing.
of handicapped students (Linde and Olsen, 1980). These accommodations include, but are not limited to:

1) flexible scheduling;
2) the use of Braille and large print test materials;
3) testing in small groups, and;
4) the use of audio-cassettes (Gillet, 1980; Linde and Olsen, 1980).

In some instances, states may provide guidelines which suggest or enumerate the appropriate test accommodations for handicapped students (Linde and Olsen, 1980), however, Rosewater (1979) contends that decisions regarding the implementation of accommodations are generally made at the discretion of local education agencies, implying that such accommodations may not be allowed as frequently as might be warranted.

The implementation of state MCT provisions for linking the award of a standard high school diploma to student MCT performance has not been viewed as particularly problematic in terms of non-handicapped students except, as previously noted, in the state of Florida. However, the implementation of MCT provisions linking the award of a standard high school diploma to the MCT performance of handicapped students has emerged as a major controversial issue in the minimum competency testing movement. During the initial stages of the development of the minimum competency test movement, McClung and Pullin (1978) warned that inadequate or inconsistent provisions governing the award of the standard high school diploma to
handicapped students might serve as a basis for due process and equal protection challenges of state MCT programs. Trachtenburg (1977) and Levin (1979) further suggested that inadequate or inconsistent MCT provisions regarding the denial of diplomas to both non-handicapped and handicapped students might also be challenged on the basis of deprivation of a liberty or a property interest.

As of January, 1983, there have been two major judicial decisions rendered with regard to legal challenges of the denial of standard diplomas to handicapped student's on the basis of state and local MCT provisions. In both cases the rulings of the courts were founded primarily upon issues directly related to the concept of due process. Briefly stated, the concept of due process is based upon the rights granted through the fifth and fourteenth amendments to the Constitution. Procedural due process pertains to procedures which must be followed in any situation in which government may deprive an individual of life, liberty or property. The basic elements required for procedural due process are:

1) adequate and proper notice of an impending deprivation;

2) a fair opportunity to contest the deprivation;

3) an opportunity to secure an impartial and fair ruling with respect to the proposed deprivation and the contest of the proposed deprivation (Alexander, Corin, McCann, 1969).

Substantive due process requires that government demonstrate a valid objective with regard to a proposal of a deprivation of an individual's rights and that the means employed to impose a
deprivation of rights are reasonable for the accomplishment of the government's objective (Alexander, Corns, McCann, 1969).

In the case of the Board of Education of the Northport-East Northport Union Free School District v. Ambach (Sup., 436 N.Y.S. 2d 564 [1981]) the state of New York had moved to invalidate the standard high school diploma awarded to two handicapped students on the grounds that the students had been issued the diplomas by their local school board in violation of state regulations requiring all students to pass the New York state Basic Competency Test (BCT) in mathematics and reading as a prerequisite for the award of a high school diploma. One student had passed the reading and failed the math section of the BCT. The BCT was not administered to the second student "apparently based on a belief that it would be futile for (the handicapped student) to attempt to pass the exam (Sup. 436 N.Y.S. 2d 564, 568 [1981])." Both students had met the educational requirements established in their IEPs.

The court appointed guardian for the handicapped students argued that the state competency test requirements violated provisions of the state constitution, Section 504, P.L. 94-142, and the equal protection and due process guarantees of the United States Constitution (Sup. 436 N.Y.S. 2d 564, 568 [1981]). The Northport (1981) court maintained that the state had a legitimate interest in establishing the competency test standard as a mechanism for maintaining quality educational programs and for insuring the value of the high school diploma. The court ruled that the implementation of the New York
BCT program and its application in the case of the individual petitioners was rationally based and thus did not violate either the state constitution or the equal protection clause of the federal constitution (Sup. 436 N.Y.S. 2d 564, 571 [1981]). The court further ruled that the award of a diploma was not a necessary element of the P.L. 94-142 concept for an appropriate education and, as a consequence, failure to meet the BCT standard for the award of a high school diploma did not violate the provisions of P.L. 94-142.

However, the Northport (1981) court, in an interpretation similar to that of the Debra P. (1981) court, did rule that the handicapped students had developed a legitimate expectation regarding the award of a standard high school diploma as a property interest under regulations in effect prior to the initiation of the BCT program. The Northport (1981) court also noted that the risk of "substantial harm (Sup. 436 N.Y.S. 2d 564, 573 [1981])" to the handicapped students from the stigma which would likely be associated with a state denial of a diploma was a factor in its ruling for the handicapped student-petitioners.

In conclusion, the Northport (1981) court ruled that the two year prior notice of the BCT diploma requirements and diploma sanction was insufficient to afford adequate opportunities for the plaintiffs to pass the BCT and thus the state competency test program, as implemented, violated the due process rights of the handicapped students. Accordingly, the court permanently enjoined the state order to invalidate the diplomas of the handicapped students.
In the case of Deborah Brockhart v. Illinois Board of Education (534 F. Supp. 725 [1982]), which was similar to Northport (1981), the court examined the propriety of the denial of diplomas by Peoria School District #150 (District #150) to eleven handicapped students who had met all other standards for the award of a regular diploma except for the requirement that they pass the District #150 minimum competency test. In an earlier administrative review of the matter, the Illinois State Superintendent of Education had determined that District #150 had the right to establish its minimum competency test as a reasonable standard for the award of a regular diploma and that such action was not prohibited by the provisions of either Section 504 or P.L. 94-142 (534 F. Supp. 725, 727 [1982]). The State Superintendent ruled, however, that District #150 had violated the due process rights of the handicapped students by failing to provide "adequate and timely notice (534 F. Supp. 725, 727 [1982])" of the competency test requirement and diploma sanction. The Superintendent, therefore, had ordered District #150 to issue "regular high school diplomas (534 F. Supp. 725, 727 [1982])" to the handicapped students. District #150 refused to comply.

Upon review of the Brockhart (1982) case, the court determined that the true issue in the case was whether the implementation of the District #150 MCT program violated the due process rights of the handicapped student-plaintiffs. In consideration of the due process issue the court defined and examined two sufficiency of notice issues: 1) the awareness of the plaintiffs with regard to the "particular goals and objectives (534 F. Supp. 725, 730 [1982])" of
the program with regard to the award of regular diplomas; and, 2) whether the notice of the program which was afforded the students provided "a sufficient period of time [for the students] to be exposed to the materials necessary to pass the Minimal Competency Test (534 F. Supp. 725, 730 [1981])."

Although the State Superintendent of Education had indicated that the individual handicapped student-plaintiffs had not been exposed to "as much as 90 percent of the material tested in the Minimal Competency Test (534 F. Supp. 725, 730 [1982])," the Brookhart (1982) court maintained that "the only possible reason" for the students' lack of exposure to the basic materials covered in the standard curriculum was that it had been determined that such exposure was inappropriate for the students (534 F. Supp. 725, 730 [1982]). With regard to the one year prior notice of the minimum competency test requirement and diploma sanction provided by District #150, the court found that there was no indication that plaintiffs were unaware of the program requirements or that the time frame of the notice or that the procedures utilized to provide the notice were insufficient in any manner (534 F. Supp. 725, 730 [1982]). The Brookhart (1982) court concluded that the implementation of the District #150 MCT program and the denial of diplomas to the handicapped student-plaintiffs had not violated due process.

As in Debra P. v. Turlington (644 F. 2d 397 [1981]), both the Northport (Supp. 436 N.Y.S. 2d 564 [1981]) and the Brookhart (534 F. Supp. 725 [1982]) courts affirmed the rational interest right of
state and local educational agencies to establish minimum competency test standards as a mechanism for maintaining quality educational programs and for ensuring the value of the high school diploma. However, the Northport (1981) and Brookhart (1982) courts differed considerably in their interpretation of the problematic concept of the diploma as a property right.

The Northport (1981) court, in citing Board of Regents v. Roth (408 U.S. 564, 577 [1972]); 92 S. Ct. 2701, 2709 [1972]; 33 L.Ed. 2d 548 [1972]), maintained that property interest concepts are not fixed but rather "they are created and their dimensions are defined by existing rules or understandings that stem from an independent source such as state law--rules or understandings (Sup. 436 N.Y.S. 2d 564, 572 [1982])." The Northport (1981) court determined that prior to the implementation of the state minimum competency test requirement the handicapped student-plaintiffs had developed a legitimate expectation with regard to the award of a diploma and, therefore, the diploma represented a property interest for the purpose of due process considerations.

The Northport (1981) court further ruled that the denial of diplomas (a property interest) would stigmatize the handicapped student-plaintiffs and impose an obstacle upon their freedom in pursuing future employment opportunities (a liberty interest). Consequently, the Northport (1981) court concluded that, given the circumstances presented in the case, the denial of diplomas and the award instead of differential certificates would deprive the handi-
capped student-plaintiffs of both a property right and a liberty interest (Supp. 436 N.Y.S. 2d 564, 572 [1981]).

In contrast, the Brookhart (1982) court maintained that the issues of the diploma as a property interest and the avoidance of the stigma likely to be associated with the denial of a regular diploma for failure to meet the competency test requirement had "nothing whatsoever to do with the legitimacy of a minimal competency test that is reasonably designed to test for a basic level of learning which a school district wishes to make certain it imparts to all those who receive its diploma (534 F. Supp. 725, 731 [1982])." The position taken by the Brookhart (1982) court on the issue of stigma and the denial of a diploma was that attainment of the knowledge required to pass the competency test was the legitimate means of avoiding stigma and that if an individual does not possess the capacity to acquire such knowledge the law does not require or warrant the "contrary pretense" inherent in the award of a regular diploma (534 F. Supp. 725, 731 [1981]).

The differences of opinion expressed by the Northport (1981) and Brookhart (1982) courts suggest that the concept of the diploma as a property right and the impact of its denial upon student liberty interests, particularly in situations involving handicapped students can not yet be considered an issue which has been clearly resolved.

MCT program provisions which allow local board discretion with regard to awarding differential diplomas and/or certificates on the
basis of the MCT performance of handicapped students are currently operational in the majority of the MCT states (NASDSE, 1979).

Although the award of a differential diploma, defined by McClung and Pullin (1978) as "a diploma that is distinguishable in any way from that awarded to non-handicapped students who pass a competency test (p. 924)," was not an issue considered in Brookhart (1982), the ruling of the court in Northport (1981), which implied agreement with the concept that differential diplomas and certificates constitute "inferior academic award(s) (Supp. 436 N.Y.S. 2d 564, 573 [1981])," suggests that the practice of awarding differential diplomas to handicapped students who fail state or local MCTs will continue to be an issue of controversy and a potential basis for legal challenge (Linde and Olsen, 1980).

The major point with respect to the Northport (1981) and Brookhart (1982) rulings, however, is that, in commenting upon their respective sufficiency of notice decisions, both the Northport (1981) and Brookhart (1982) courts appear to have directly linked the relationship between the IEP and minimum competency test programs to the concepts of procedural and substantive due process. The Northport (1981) court contended that as a result of the individualized nature of the instructional programs required for handicapped students the time frame for notice of new program requirements was "much more crucial (Supp. 436 N.Y.S. 2d 564, 574 [1981])" for handicapped students than for non-handicapped students. The Northport (1981) court noted that "It is apparent that (the handicapped
students') programs of instruction were not developed to meet a goal of completing a BCT in order to receive a diploma but rather were developed to address individual educational needs (Supp. 436 N.Y.S. 2d 564, 573 [1981])."

The Northport (1981) court also cited the content of an information bulletin which was published by the state (Information Bulletin #29, February, 1980; Petitioner's Exhibit 31) as a basis for the ruling of the court with regard to the sufficiency of the notice of the BCT requirements. Specifically, the state had indicated that handicapped students were to be provided the opportunity to participate in the BCT program and were to receive "appropriate remedial instruction as indicated by the test results (Supp. 436 N.Y.S. 2d 564, 574 [1981])" and "access to the required curriculum sequence of course work necessary to attain a high school diploma (Supp. 436 N.Y.S. 2d 564, 574 [1981])."

The Brookhart (1982) court, on the other hand, ruled that the one year prior notice of the competency test requirements for a diploma was sufficient, and maintained that the "only possible reason" that the handicapped student plaintiffs in the case had not been exposed to approximately 90 percent of the material covered on the district's minimum competency test was that for some reason a determination had been made during the development of the students' IEPs that such exposure was, apparently, considered to be inappropriate for the students (534 F. Supp. 725, 730 [1982]).

The rulings of the Northport (1981) and Brookhart (1982) courts
clearly suggest that these courts may have assumed that there was a direct operational relationship between the IEP and the minimum competency test programs in question. However, Linde and Olsen (1980), Rosewater (1979), Schenck and Welch (1980), and Smith and Jenkins (1980) indicate that a direct relationship between the IEP and MCT programs may not be established policy or an operational reality in many MCT states.

The establishment of a clear and direct operational relationship between the IEP and state and local minimum competency test programs is strongly advocated in the professional literature addressing minimum competency testing of handicapped students. Linde and Olsen (1980), McCarthy (1980), Morrissey (1978), Rosewater (1979) and Ross and Weintraub (1980) contend that the provisions of Section 504 of Public Law 93-112, The Vocational Rehabilitation Act of 1973 (45 Code of Federal Regulations, Part 84; 42 Federal Register 22675, May 4, 1977), which are codified as 29 United States Code (U.S.C.) § 794, serve as the legal basis for requiring state and local education agencies to provide handicapped students the opportunity to participate in MCT programs. Section 504 is a major article of civil rights legislation and represents the first such legislation designed to protect the rights of the handicapped (Ballard and Zettel, 1977; NASDSE, 1979). The statute reads:

No otherwise qualified handicapped individual in the United States...shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be
subjected to discrimination under any program or activity receiving federal financial assistance (U.S.S. 87, 93, 1, 1973, p. 394).

Simply stated, Section 504 prohibits discrimination against the handicapped and provides safeguards for the handicapped against the denial of access to programs available to the non-handicapped.

purpose of P.L. 94-142 is contained in Section 3(c) of the act.

Section 3(c) states:

It is the purpose of this Act to assure that all handicapped children have available to them...a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist states and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children (United States Statutes 89, 94, 1, 1975, p. 775).

Bersoff and Veltman (1979) have interpreted this statement of purpose as indicating that the intent of the act is to ensure that the specific educational needs of handicapped students will be the foundation upon which the individualized educational program for each handicapped student is designed, implemented and evaluated.

In summary form, the rules and regulations of P.L. 94-142 (42 FR 42474, 1977) require the state and its local educational agencies (IEAs) to comply with the standards of the act in the following areas:

1) Assurance of the availability of a free, appropriate public education for all handicapped children.

2) Assurance of the maintenance of an individualized education program for all handicapped children.
3) A guarantee of complete due procedural safeguards.
4) The assurance of regular parent or guardian consultation.
5) Assurance of special education being provided to all handicapped children in the "least restrictive" environment.
6) Assurance of nondiscriminatory testing and evaluation.
7) A guarantee of policies and procedures to protect the confidentiality of data and information.
8) Assurance of an effective policy guaranteeing the right of all handicapped children to a free, appropriate public education at no cost to parents or guardians.
9) Assurance of a surrogate to act for any child when parents or guardians are either unknown or unavailable or when such child is a legal ward of the state (Ballard and Zettel, 1977, p. 184).

In short, P.L. 94-142 requires that handicapped students be provided a free and appropriate public education and specifically stipulates the rights of handicapped students in educational settings (Linde and Olsen, 1980).

In operational terms, the rules and regulations for Section 504 (42 FR 22675, 1977) provide a direct basis of support for the provisions of the rules and regulations for P.L. 94-142 (42 FR 42474, August 23, 1977). Section 84.36 "Procedural Safeguards" of the Section of 504 regulations, for example, states that compliance with the procedural safeguards of Section 615 of the Education of the Handicapped Act (P.L. 94-142) is "one means of meeting" the pro-
cedural safeguards requirements of Section 504 (NASDSE, 1977, p. 9). In addition, Section 84.33 (b) (2) of the Section 504 regulations states that "implementation of an individualized education program (IEP) developed in accordance with the Education of the Handicapped Act is one means of providing an appropriate education (42 FR 42474, 42675, 1977)." As a consequence, for all practical purposes, the evaluation and educational program requirements of the rules and regulations of P.L. 94-142 "constitute the basic compliance requirements" for the provisions of the rules and regulations of Section 504 of the Rehabilitation Act of 1973 (NASDSE, 1977, vi).

Turnbull and Turnbull (1978) contend that the provisions of the regulations of P.L. 94-142 which pertain to the individualized education program (IEP) were designed to ensure the realization of the purpose of the act. The provisions of P.L. 94-142 define "special education," in part, as "specially designed instruction (...) to meet the unique needs of a handicapped child (42 FR 42474, 42480, 1977)." The term "individualized education program" (IEP) is defined by P.L. 94-142 as:

> A written statement for each handicapped child developed in any meeting by a representative of the local educational agency or an intermediate educational unit who shall be qualified to provide or supervise the provision of, specially designed instruction to meet the unique needs of handicapped children (20 U.S.C. § 1401 [19] 1976, p. 1093).

In essence, the IEP is the primary management tool through which the
states and their LEAs are to assure that a program which is appropriate to meet the special educational needs of each handicapped student is developed and that the educational program designed is, in fact, implemented and its effectiveness evaluated (Abelson and Weintraub, 1977; 46 Federal Register, 5460, 5462, 1981; Morgan, 1981). The basic mandated components of the IEP are:

(a) A statement of the child's present levels of educational performance;

(b) A statement of annual goals, including short-term instructional objectives;

(c) A statement of the specific special education and related services to be provided to the child and the extent to which the child will be able to participate in regular educational programs;

(d) The projected dates for initiation of services and the anticipated duration of the services; and,

(e) Appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short-term instructional objectives are being achieved (46 Federal Register, 5460, 5469, 300, 346, 1981).

Just as the IEP is considered to be the heart of P.L. 94-142 (Abelson and Weintraub, 1977; Larsen and Poplin, 1981; Morgan, 1981; Turnbull and Turnbull, 1978), the content of the annual goals and short-term instructional objectives of the IEP are viewed as the heart of the IEP for assuring that handicapped students will be
provided rational and meaningful educational programs (Affleck, Lowenbraun, and Archer, 1980; Kaye and Aserlind, 1979). The Federal definition with respect to the annual goals and short-term instructional objectives of the IEP are straightforward. The annual goals of the IEP are defined as "statements which describe what a handicapped child can reasonably be expected to accomplish within a twelve month period in the child's special education program (46 FR 5460, 5470, 1981)." Short-term instructional objectives of the IEP are defined as "measurable, intermediate steps between a child's present levels of educational performance and the annual goals that are established for the child (46 FR 5460, 5470, 1981)." It is intended that the short-term instructional objectives of the IEP be developed on the basis of "a logical breakdown of the major components of the annual goals (46 FR 5460, 5470, 1981)." The short-term instructional objectives of the IEP are used:

1) to describe what a given child is expected to accomplish in a particular area within some specified time period; and
2) to determine the extent to which the child is progressing toward those accomplishments (46 Federal Register 5460, 5470, 1981).

To a marked extent, the requirements of 34 CFR 300.346 (1980) pertaining to the relationship between IEP statements of present levels of educational performance and the development of annual goals and short-term instructional objectives reflect the advocacy found in the professional literature for linking assessment to the
development of concise written educational goals and instructional objectives as the foundation for the design and implementation of effective programs of individualized instruction (Blackman, 1964; Cartwright, Cartwright and Ysseldyke, 1973; Cox and Lindvall, 1971; Cronback, 1967; Dunn, 1971; Edling, 1971; Hackett, 1971; Nager, 1962; Meyen, 1972; Minskoff, 1973; Reger, Schroeder and Yschojd, 1968; Tyler, 1951).


Hayes (1977), Morgan (1981) and Ysseldyke and Salvia (1978)
stress the necessity of establishing a direct relationship between assessment of a student's present levels of educational performance and the determination of instructional goals and objectives for the development of an effective program of individualized instruction. Hayes (1977), for example, maintains that among other benefits, written goals and objectives provide:

1) greater accountability;
2) improvement in the relevance of teacher preparation; and,  
3) enhancement of the focus of learning activities.

Without clearly stated goals and objectives, Gage and Berliner (1975), Mager (1962), and Popham (1981a) contend that instruction lacks foundation and is likely to be disorganized and ineffective. These authors emphasize the importance of clearly stated goals and objectives in providing direction in the planning of effective instructional programs and they stress the utility which written goals and objectives provide in forming a basis upon which to evaluate the impact of an educational program in terms of student achievement.

In general practice, academic assessment data provide the primary basis for the development of appropriate annual goals and short-term instructional objectives through identification of which skills and knowledge a student has and has not mastered (Morgan, 1981). The provisions of 46 Federal Register 5460 (1981) are concise in stating that within the IEP "there should be a direct relationship between the annual goals and the present levels of a student's educational performance (p. 5470)."
Admittedly, the literature addressing minimum competency testing of handicapped students contains no truly comprehensive statement which clearly and systematically outlines a theoretical rationale for conceptualizing the provisions of Section 504 and P.L. 94-142 as the rational and legal basis for the establishment of a direct operational relationship between the IEP and MCT programs. However, it is reasonable to infer from the literature (Amos, 1980; Ewing, 1978; Gillet, 1980; Hull, Garvin and Withey, 1979; Pullin, 1980; Rosewater, 1979; Ross and Weintraub, 1980; Schenck, 1981b; Safer, 1980; Smith and Jenkins, 1980) that such a rationale might well be summarized in the following manner:

1) if: minimum competency tests, in effect, assess the present levels of a student's educational performance with respect to the skills and knowledge which the state has deemed to be the essential components of an educational program of adequate quality for all students (Clarke and Thomson, 1979; Gallagher and Hall, 1979; Gorth and Perkins, 1979; Lewis, 1979; Phipho, 1978; Schenck, 1981a,b; Schenck and Welch, 1980); and,

2) if: the provisions of Section 504 are applicable as a legal basis for requiring that handicapped students be provided an opportunity to participate in and benefit from all aspects of state and local MCT programs (Linde and Olson, 1980; McCarthy, 1980; Morrissey, 1979; Rosewater, 1979);

3) then: it is logical to expect that the relationship between Section 504 and P.L. 94-142 would rationally require that the
IEP serve as the mechanism for establishing and documenting a direct link between the skills and knowledge assessed by MCT programs and the educational programs provided for handicapped students (Amos, 1980; Ewing, 1979; Gillet, 1980; Hull, Garvin, and Withey, 1979; Linde and Olsen, 1980; McCarthy, 1980; Olsen, 1980; Safer, 1980; Schneck and Welch, 1980; Smith and Jenkins, 1980).

Ewing (1979), for example, proposes that in situations in which student performance on an MCT is tied to diploma requirements a "formal systematic (p. 117)" procedure for determining the "nature and extent (p. 117)" of the participation of handicapped students in MCT programs should be established. Ewing (1979) further contends that the IEP decision-making process and the IEP document in particular are appropriate for "use in determining the extent of expectation for each student in relation to required competency test proficiency (p. 117)." Similarly, Schneck and Welch (1980) maintain that if handicapped students are to participate in MCT programs the IEP should stipulate:

1) the competencies in which a student is to attain and demonstrate proficiency;
2) the level of proficiency to be expected of the student; and
3) alternative instructional and testing strategies.

These authors assert that the IEP should be utilized to link MCI skills with the development of individualized instructional programs.

Olsen (1980) contends that the basic purpose and operational intent of both the IEP and state and local MCT programs is to
improve student skills and knowledge. He warns, however, that unless IEP goals and objectives are directly linked to MCT objectives the relationship between the content and focus of instructional programs developed for handicapped students and the instructional programs provided for non-handicapped students is likely to be tenuous at best. Amos (1980), Gillet (1980), Hull, Garvin and Withey (1979), and Safer (1980) have also suggested that coordinating IEP and MCT objectives would more rationally ensure the provision of an adequate system of benefits and protections for handicapped students participating in minimum competency testing programs. This position is supported by Smith and Jenkins (1980) who maintain that establishment of a direct relationship between the IEP and minimum competency test programs would provide for a more accurate definition of relevant MCT and non-MCT goals and objectives for handicapped students. Smith and Jenkins (1980) propose that such a relationship would allow for more appropriate continuity in assessment of the progress of handicapped students toward mastering MCT-skills in a manner which would be consistent with both the "spirit and the letter of P.L. 94-142 (p. 442)."

From a perspective similar to that advanced in Northport (1981) which focused upon the time factor necessary to prepare to meet the requirements of an MCT program, Hull, Garvin and Withey (1979) and Rosewater (1979) have argued that many handicapped students have only relatively recently been provided expanded access to instructional programs in regular classes and, as a
consequence, such students may not have experienced sufficient opportunities to benefit from instruction addressing material of the type covered by state and local MCTs. These authors suggest that linking the goals and objectives of MCT programs to the content of the IEP would provide handicapped students a more adequate and appropriate opportunity to develop proficiency in the skills assessed by MCT programs.

In stating that a major purpose of the long range goals and short-term objectives of the IEP is to ensure that instructional programs for handicapped students are appropriate and individualized on the basis of a student's identified educational strengths and weaknesses, McCarthy (1980) stresses that the relationship between MCT programs and the content of the IEPs of handicapped students should be designed to be complimentary, especially in view of the purported goal of utilizing MCT assessment of individual student mastery of basic instructional program objectives for the purpose of providing appropriate remediation. Rosewater (1979) has proposed that a student's "inadequate performance (p. 12)" on an MCT should lead to a review and possibly a revision of the content of the student's IEP.

Safer, Morrissey, Kaufman and Lewis (1978) and Turnbull and Turnbull (1978) have suggested that the IEP, in effect, operationalizes a diagnostic-prescriptive approach to the development and implementation of educational programs for handicapped students. The basic elements of the diagnostic-prescriptive approach to
educational programming include:

1) assessment of individual student's strengths and weaknesses in specific educational skills areas which are considered to be prerequisites for satisfactory performance and progress in the classroom;

2) development and implementation of an individual program of instructional intervention strategies based upon assessment data; and

3) evaluation of the effectiveness of instructional intervention in terms of student performance (Moran, 1979; Peter, 1965). Fenton (1980) contends that utilizing MCT performance results in a prescriptive manner in developing and revising the content of the annual goals and short-term instructional objectives of the IEPs of handicapped students would be consistent with the diagnostic-prescriptive nature of the IEP process, especially in terms of linking assessment of current levels of educational performance to planning, implementation and evaluation of instructional intervention programs for handicapped students participating in MCT programs.

Kaye and Aserlind (1979) have also indicated support for the establishment of a direct relationship between the content of the IEP and the skills and knowledge assessed by MCT programs. These authors view the IEP, essentially, as a set of "tangible descriptors (p. 139)" which, in outlining an educational program on the basis of an individual student's assessed educational strength and weaknesses, provides a sound structural framework for continuous educational
program decision-making with regard to appropriate instructional content, sequence and resources. Kaye and Aserlind (1979) contend that the implicit assumption of the IEP process is that the linking of assessed educational needs to specific instructional objectives will more adequately ensure that individual handicapped students will be provided a "reasoned and rational educational program (p. 139)."

In a like manner, Hayes (1977) and Turnbull and Turnbull (1978) contend that, to be relevant, the IEP must specify a meaningful educational program. Turnbull and Turnbull (1978) also contend that the IEP should specify a "systematic and coordinated (p. 122)" program of instruction developed on the basis of a "hierarchy of (needed) skill and concept development (p. 122)." These authors further suggest that programs which are unresponsive to the educational needs of individual handicapped students violate the principle of equal protection by functionally excluding handicapped students from an opportunity to "substantially benefit (p. 20)" from their educational placement. Lewis (1979) appears to support this interpretation in stressing that the concept of substantive due process requires that students be provided a "fair chance (p. 160)" in terms of a "meaningful opportunity (p. 160)" to acquire the skills to be assessed by a state examination.

In essence, the underlying theme of the literature regarding the skills assessed by MCT programs and the development and function of the IEP, is that documentation of planned instruction in specific MCT skills, through written IEP annual goals and short-
term instructional objectives, would more adequately assure handicapped students of "fair" and "meaningful" opportunities to benefit from instruction in the skills assessed by state or local MCTs. The major implication is that a reasoned and rational educational program would clearly necessitate the inclusion of specific MCT goals and objectives in the annual goals and short-term instructional objectives of the IEPs of many handicapped students, who, given the opportunity, may well be able to master the skills assessed by state and local MCT programs (Amos, 1980; Ewing, 1979; Gallagher and Hall, 1979; Rosewater, 1979).

However, although several states utilize the IEP to delineate MCT modifications and exemptions (Crise, 1980; Hull and Garvin and Withey, 1979; Schenck and Welch, 1980), it appears that most MCT states have not yet developed or formalized specific policies regarding the relationship between the skills assessed by their MCT programs and the annual goals and short-term objectives of IEPs of handicapped students (Gort and Perkins, 1979b; Linde and Olson, 1980; Schenck and Welch, 1980; Smith and Jenkins, 1980).

The lack of specific policies regarding the establishment of a direct relationship between the skills assessed by MCTs and the content of the annual goals and short-term objectives of the IEP is linked to the emergence of the issue of remedial programs for handicapped students who fail state and local MCTs. In terms of the concept of a "fair chance (p. 160)" to acquire MCT skills and the protection of students' due process rights, Lewis (1979) suggests that "only with a commit-
ment to remedial education can competency-based graduation require-
ments arguably serve the educational interests of students (p. 170)." Tractenberg (1977) and Lewis (1979) have also suggested that denying
a student a standard diploma without provision of adequate remedial
programs or opportunities to benefit from remedial instructional
programs may provide a foundation for legal challenges to state and
local MCT programs on the basis of deprivation of a property interest
without proper procedure.

Concern regarding the general lack of specific provisions for
remedial programs for students who fail MCTs applies to both handicapped
students and non-handicapped students. Riegel and Lovell (1980), for
example, note that the National Education Association of School
Administrators, the National School Boards Association and the Parent-
Teacher Association at the national level have voiced opposition to the
development of MCT programs unless they are tied to remedial programs
(p. 8).

Although remedial programming is linked in some fashion to the
MCT performance of non-handicapped students in approximately 19
states and is actually mandated in nine states (Gorth and Perkins,
1979b; Lewis, 1979; Pipho, 1980a,b,c; Strang, 1981) many MCT
states have not, as yet, formulated specific policies regarding the
locus of responsibility for the organization and provision of
remedial programs for handicapped students who fail state or local
MCTs (Rosewater, 1979; Smith and Jenkins, 1980). Smith and Jenkins
(1980) have indicated that, at the time of their 1978 summer survey,
In 25 MCT states either no policy had been developed or existing special education programs and services were expected to meet the needs of handicapped students for remediation of identified MCT skills deficits. Amos (1980), Ewing and Smith (1980), Gallagher and Hall (1979), Gillett (1980), Linde and Olsen (1980), McCarthy (1980), Olsen (1980), Rosewater (1979), and Smith and Jenkins (1980) have proposed that remedial programs must be made available to handicapped students who fail state or local MCTs. However, Rosewater (1979) has suggested that in many states handicapped students who receive instructional services in special education programs are viewed as receiving remedial services and, as a consequence, are not likely to be provided additional remedial services in terms of identified deficiencies in MCT skills.

As a final note with regard to the issue of remedial programs for handicapped students who fail state or local MCTs, Linde and Olsen (1980) have warned that equating special educational programming with remedial placement "many deny the rights of the special education student to equal access to MCT remedial programs (p. 7)."

Summary

It appears that states which have implemented MCT programs have resolved most of the issues which were considered problematic during the early stages of the development of the current MCT movement. In addition, several courts' rulings have affirmed the "rational-interest" right of the states to develop and implement non-discriminatory competency testing programs for all students (Brookhart 534 F.

However, despite assertions that the provisions and regulations of Section 504 and P.L. 94-142 are applicable in governing the relationship between MCT programs and the design and implementation of individualized educational programs for handicapped students, states currently implementing MCT programs have not, in general, clearly resolved a number of vital interrelated issues concerning the minimum competency testing of handicapped students. Central among the unresolved issues with regard to the minimum competency testing of handicapped students is the issue of the relationship between the annual goals and short-term objectives of the IEP and the skills assessed by state and local competency testing programs.

Although the establishment of a direct and clearly defined relationship between the skills assessed by competency tests and the annual goals and the short-term objectives of the IEP is viewed as a means of ensuring handicapped students of fair and meaningful opportunities to benefit from their placement in special education and is strongly advocated in the professional literature, such a relationship has not been established as policy or as an operational reality in the states which have implemented MCT programs.
Section Three: Virginia's Graduation Competency Test (GCT) Program

Minimum competency testing in the Commonwealth of Virginia actually consists of two distinct programs: the Basic Learning Skills (BLS) program for elementary and intermediate school students and the Graduation Competency Test (GCT) program for high school students (Commonwealth of Virginia 1, 1979; Gorth and Perkins, 1979a; Impara, 1980; Ramsbotham, 1980; Robinson, 1978). The legal basis for the development of both programs can be traced to the educational program clause and the standards of quality clause of Article VIII of the 1971 revision of the Constitution of Virginia (Commonwealth of Virginia 1, 1979) and to the accreditation provisions of Section 22-21 of the Code of Virginia.

Section 1, Article VIII of the 1971 revision of the Constitution of Virginia requires the General Assembly to exercise responsibility for ensuring the establishment and maintenance of quality public educational programs. Section 1, Article VIII of the Constitution of Virginia states:

The General Assembly shall provide for a system of free public elementary and secondary schools for all children of school age throughout the Commonwealth, and shall seek to ensure that an educational program of high quality is established and continually maintained (Commonwealth of Virginia 10, 1979, pp. 15-16). Section 2, Article VIII requires that standards of quality for
public education in the Commonwealth of Virginia be determined and prescribed by the Board of Education. Section 2, Article VIII of the Constitution of Virginia states:

Standards of quality for the several school divisions shall be determined and prescribed from time to time by the Board of Education, subject to revision only by the General Assembly (Commonwealth of Virginia 10, 1979, pp. 16-17).

In effect, the purpose of the Standards of Quality (SOQ) is to establish the "basic policies and goals" of public education in Virginia (Commonwealth of Virginia 17, 1976, p. 4). The SOQ are prescribed every two years by the Board of Education in conjunction with the biennial budget requirements of Virginia and, although the SOQ are classified as a "special act" of the General Assembly and are not codified as are general laws, the SOQ carry the force of law and are under the jurisdiction of the state attorney general (Szakel and Edwards, 1981).

The accreditation provisions of Section 22-21 of the Code of Virginia authorize and require the State Board of Education to take all necessary and appropriate action to ensure the establishment and maintenance of educational programs of high quality in the local school divisions throughout the Commonwealth. Section 22-21 "Encouragement of elementary and secondary schools; kindergartens and nursery schools" of the Code of Virginia, reads, in part, as follows:

The State Board is authorized and required to do all things necessary to stimulate and encourage local supervisory activities
and interest in the improvement of the elementary and secondary schools and further the State Board may provide for the accreditation of elementary and secondary schools in accordance with standards prescribed by such Board (Commonwealth of Virginia 10, 1978, p. 39).

Under these provisions the Board establishes specific standards for accrediting schools in Virginia which are "designed to provide general guidance and direction for the schools in the state" in the development and maintenance of high quality educational programs (Commonwealth of Virginia 15, 1978, p. 1).

During 1974, the General Assembly, through House Joint Resolution 142 (H.J.R. 142 [1974]) (Commonwealth of Virginia 16, 1974), in conjunction with a 1973 recommendation of the Board of Education, authorized the first comprehensive review of the SOQ (Commonwealth of Virginia 17, 1976). The purpose of the Joint House-Senate Subcommittee to Review the Standards of Quality in Education (H.J.R. 142 [1974]) was to review the content of the SOQ and to determine the "impact" of the SOQ on public education in Virginia (Commonwealth of Virginia 17, 1976, p. 1).

Citing a philosophy that "the quality of education is measured ultimately by what students learn (output) rather than the quantity and/or quality of resources devoted to education (input) (p. 2)" the H.J.R. 142 (1974) subcommittee developed the following premises as guides for review of the standards:
1. The basic purpose of the Standards of Quality is to establish minimum elementary and secondary educational goals that are to be met for each child (to the extent practicable) throughout the Commonwealth.

2. Standards established by the General Assembly should be oriented primarily towards products (objectives, outputs and goals) rather than processes (inputs and means), thereby creating a structure and an environment for quality education.

3. Key to improving the quality of education is defining in more concrete and specific terms the educational objectives that are to be achieved in the individual school.

4. To the greatest extent possible, each student in a classroom should be challenged, not defeated, by what is being taught in that classroom.

5. Working within the concept of the Standards of Quality the Board of Education should develop accreditation standards and specific educational objectives that are to be met by each school division (Commonwealth of Virginia 17, 1976, p. 6).

The findings of the H.J.R. 142 (1974) subcommittee in its study of the SOQ and public education in Virginia, as reported in House Document No. 19 (1976), are summarized as follows:

1. The educational skills of a higher than national percentage of Virginia students in grades 4, 6, and 8 were below grade
level.

2. Virginia students exhibited a significant deterioration in educational skills as they move from grades 4 to 6 and from grades 6 to 8.

3. Criterion-referenced tests which employ an absolute scale in terms of student mastery of specific basic skills provide a better diagnosis and measure of a student's academic achievement than do standardized norm-referenced tests.

4. The accuracy of standardized test results depends upon the extent to which the content of the test measures what is actually being taught in the classroom.

5. Testing programs may be designed and utilized to assist in shaping the content of instruction by making program results available to parents, teachers, administrators and the public (Commonwealth of Virginia 17, 1976, pp. 8-28).

These findings served as the foundation for the development of a second set of premises upon which the H.J.R. 142 (1974) subcommittee formulated recommendations for revision of the SQQ for the 1976-1978 biennium. In summary form these premises stated:

1. The necessity for and responsibility of the General Assembly to establish a foundation for a basic educational skills program.

2. Testing should be utilized as a diagnostic and an accountability measure.
3. The development of instructional and testing programs should be based upon identified educational objectives.

4. The primary goal of testing should be identification and remediation of students' academic deficiencies (Commonwealth of Virginia 17, 1976, pp. 8-28).

In effect, the revisions in the S0Q for the 1976-1978 biennium which were recommended by the H.J.R. 142 (1974) subcommittee and adopted by the General Assembly served to establish an educational policy emphasis on basic skills in the public schools of Virginia and initiated the development of the present basic learning skills (BLS) testing program for students in the elementary and intermediate grades (Impara, 1980; Ramsbotham, 1980). Parts A and B of Standard 1 "Basic Learning Skills" of the 1976-1978 S0Q state:

A. The General Assembly believes that one of the fundamental goals of public education must be to enable the students to achieve, to the best of his or her ability, certain basic skills. Each school division shall, therefore, give the highest priority in its instructional program to developing the reading, communications, and mathematics skills of all students with concentrated effort in the primary (kindergarten through grade three) and intermediate (grades four through six) grades. Remedial work shall begin for low achieving students upon identification of their needs.
B. By September, nineteen hundred seventy-eight, the Board of Education in cooperation with the local school divisions, shall establish specific minimum statewide educational objectives in reading, communications and mathematics skills that should be achieved during the primary grades and during the intermediate grades (Commonwealth of Virginia 13, 1976, p. 2).

Standard 7 "Testing and Measurement" Part B of the 1976-1978 SOQ required the development and implementation of a coordinated program of statewide testing of basic skills. Part B of Standard 7 states:

Beginning in September, nineteen hundred seventy-eight, each school division shall annually administer uniform statewide tests developed by the Department of Education to measure the extent to which each student in that division has progressed during the last year in achieving the specific educational objectives that have been established under Standard 1-B (Commonwealth of Virginia 13, 1976, p. 5).

In conjunction with the 1976 revision of the SOQ the Board of Education also revised the Standards for Accrediting Schools in Virginia (Commonwealth of Virginia 1, 1978; Impara, 1980). Adopted within the revision of these standards was a modification of the "Graduation Eligibility" section of Standard C which, in fact, was the initial state provision for requiring that Virginia's students demonstrate minimum competency in the areas of reading and mathematics.
on tests prescribed by the Board of Education as a criterion for the award of a standard high school diploma (Commonwealth of Virginia 4, 1980, p. 18; Gorth and Perkins, 1979b; Impara, 1980). Standard C of the 1976 revised "Graduation Eligibility" section of the Standards of Accrediting Secondary Schools in Virginia reads:

In order to graduate from an accredited secondary school and receive a high school diploma in Virginia, students shall earn the number of units of credit prescribed by the Board of Education and be able to demonstrate to the satisfaction of local school officials attainment of the following minimum competencies:

1. Functional literacy in communication skills including the ability to read, write and speak;

2. Computational skills including the ability to work with decimals and percentages to the extent that they can effectively participate in society as consumers;

3. A basic knowledge and understanding of the history and cultures of the United States, including concepts and processes of democratic governance and our economic system;

4. The ability to pursue higher education in post secondary schools or gain employment as a result of having gained a job entry skill (Impara, 1980, p. 290).

In actuality, therefore, separate, yet apparently, related actions taken by the General Assembly and the Board of Education during 1976
initiated the development of the two minimum competency testing programs in Virginia (Davis, 1982; Gortli and Perkins, 1979a; Impara, 1980; Ramsbotham, 1980).

Prior to the 1976 revision in the "Graduation Eligibility" section of the Standards for Accrediting Schools in Virginia, provisions for graduation from an accredited high school in the state of Virginia required only that a student earn a certain number of Carnegie-type units of credit in a variety of specified school subjects (Impara, 1980). Under the 1976 revised graduation requirements local school divisions were to be responsible for developing programs for identifying and assessing skills in the specified competency areas (Impara, 1980; Ramsbotham, 1980; Robinson, 1978). The problems inherent in the development of competency-based graduation requirements at the local level; costs, inconsistency in program approaches, conflicting competency certification criteria, test development and time constraints, led the Virginia Association of School Administrators to recommend that the state develop uniform statewide minimum competency tests (Davis, 1982 [Appendix B]; Impara, 1980; Ramsbotham, 1980; Robinson, 1978). As a result, the 1978 General Assembly adopted the concept of a competency-based graduation requirement and mandated, through House Bill 402 (H 402 [1978]) (Commonwealth of Virginia 22, 1978), the development of a statewide minimum competency testing program for high school graduation through Section 9 "Testing and Measurement", Part, C of the 1978-1980 SOQ (Gortli and Perkins, 1979b; Impara, 1980). Section 9C of the 1978-1980 SOQ states:
It is the policy of the Commonwealth that the awarding of a high school diploma shall be based upon achievement. In order to receive a high school diploma from an accredited secondary school after January 1, 1981, students shall earn the number of units prescribed by the Board of Education and attain minimum competencies prescribed by the Board of Education. Attainment of such competencies shall be demonstrated by means of a test prescribed by the Board of Education (Commonwealth of Virginia 3, 1978, p. 6).

The provisions of Section 9C of the 1978-1980 SOL necessitated a revision of the "Graduation Eligibility" section of the 1976 Standards of Accrediting Secondary Schools in Virginia to establish uniformity in the state's graduation requirements (Commonwealth of Virginia 1, 1979). In 1978 the "Graduation Eligibility" section of Standard C of the 1976 Standards for Accrediting Secondary Schools in Virginia was revised to read as follows:

In addition to the units of credit specified in these standards, an accredited school shall require as a condition of graduation that students demonstrate mastery of minimum competency in the areas of reading and mathematics on tests prescribed by the Board of Education. Local authorities shall also require evidence, through performance related assessment tasks as part of the instructional program and/or through a test of preferred by a locality, that graduates have attained minimum competencies in the following:
1. Essential skills and concepts of citizenship, including knowledge of history and government, necessary for responsible participation in American society within the world community.

2. The knowledge to qualify for further education or employment.

*Effective no later than with the graduating class of 1981 (Commonwealth of Virginia 15, 1978, p. 8).

In compliance with the provisions of Standard 9C of the 1976-1978 SOL and the provisions of the 1978 revised "Graduation Eligibility" section of Standards for Accrediting Schools in Virginia, particularly those provisions pertaining to prescribed testing in specified skills areas, the Department of Education (DOE), with the assistance of representatives of local school divisions and special interest groups throughout the state, identified specific competencies and performance indicators in reading and mathematics as the basis of the Virginia GET program (Commonwealth of Virginia 19, 1978; Impara, 1980). Acting upon the recommendation of the DOE, the Board of Education, in June of 1978, adopted two commercially available tests as the assessment components for the GET program (Impara, 1980). A special edition of the I0X Basic Skill Test: Secondary Level (1978) published by the Instructional Objectives Exchange was selected as the Commonwealth of Virginia Reading Test, Form 2, Secondary Level for the assessment of
Basic reading skills competencies and a modified version of a mathematics test developed by the Scholastic Testing Service for the Virginia Beach City Public Schools was adopted as the Commonwealth of Virginia Graduation Competency Test--Mathematics, Form B. Both of these assessment measures are multiple choice criterion-referenced instruments (Commonwealth of Virginia 20, 1978; Gordes and Perkins, 1979b; Impara, 1980; Ramsbotham, 1980). Students must meet the scaled score performance standard of 70 on each section of the GCT as a basic criterion eligibility for the award of a standard high school diploma.

In its current form the mathematics section of the GCT consists of 99 basic and functional skill items measuring 15 competencies (Figure 1).

**FIGURE 1**

**GCT-Reading**

<table>
<thead>
<tr>
<th>Item</th>
<th>$^1$ Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Understanding safety warnings</td>
</tr>
<tr>
<td>2.</td>
<td>Completing forms and applications</td>
</tr>
<tr>
<td>3.</td>
<td>Using reference sources</td>
</tr>
<tr>
<td>4.</td>
<td>Determining main ideas</td>
</tr>
<tr>
<td>5.</td>
<td>Using documents</td>
</tr>
<tr>
<td>6.</td>
<td>Using documents</td>
</tr>
</tbody>
</table>

**GCT-Math**

<table>
<thead>
<tr>
<th>Item</th>
<th>$^2$ Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Read and work materials</td>
</tr>
<tr>
<td>2.</td>
<td>Compute numerical values</td>
</tr>
<tr>
<td>3.</td>
<td>$+, -, x$, $\times$ whole numbers</td>
</tr>
<tr>
<td>4.</td>
<td>$+,-, x$, $\times$ decimal fractions</td>
</tr>
<tr>
<td>5.</td>
<td>Multiple choice for functions</td>
</tr>
<tr>
<td>6.</td>
<td>Express percentage as decimals</td>
</tr>
<tr>
<td>7.</td>
<td>Percent fractions as decimals</td>
</tr>
<tr>
<td>8.</td>
<td>Find a given percent of a number</td>
</tr>
<tr>
<td>9.</td>
<td>Find the percentage that appears</td>
</tr>
<tr>
<td>10.</td>
<td>Determine direction from a map</td>
</tr>
<tr>
<td>11.</td>
<td>Read maps, interpret and locate tables</td>
</tr>
<tr>
<td>12.</td>
<td>Know concepts of circle and parts of circle</td>
</tr>
<tr>
<td>13.</td>
<td>Determine straight and arc of fractions</td>
</tr>
<tr>
<td>14.</td>
<td>How to determine units and standard units of time</td>
</tr>
<tr>
<td>15.</td>
<td>Solve practical problems in personal finance</td>
</tr>
</tbody>
</table>

$^1$ Items

$^2$ Items
encompassed by 33 performance indicators with three items per competency (Commonwealth of Virginia 25, 1979; Gorth and Perkins, 1979b; Impara, 1980; Ramsbotham, 1980). The reading section contains 60 functional skill items measuring five skills (Figure I) with 10-20 items per skill (Commonwealth of Virginia 25, 1979; Gorth and Perkins, 1979a; Impara, 1980; Ramsbotham, 1980). (A brief description of the GCT mathematics test and a teacher's manual for the I0X Basic Skill Test are provided in Appendix B.)

Although the primary function of the GCT is to determine eligibility for the award of a standard high school diploma and to identify students in need of remedial instruction (Commonwealth of Virginia 2, 1900; Gorth and Perkins, 1979a; Impara, 1980; Ramsbotham, 1980), remedial programs are not specifically required by the current Virginia legislation and state funds have not been made available for GCT-based remedial programs (Gorth and Perkins, 1979b; Ramsbotham, 1980). In effect, responsibility for remediation has been delegated to the local school divisions (Gorth and Perkins, 1979b).

Local school divisions are responsible for test administration and test security while test scoring is the responsibility of the State Department of Education (Gorth and Perkins, 1979b). The GCT performance of individual students is reported to parents, students and teachers through a confidential individual skill analysis (ISA) profile which is designed to identify student strengths and weaknesses in the skills assessed (Commonwealth of Virginia 8a, 1980). Test results indicating percentages of students passing both sections,
only one section, and passing neither section of the GCT in each
school division are made available by the State Department of Education
to local school divisions, the general public and the media (Gorth
and Perkins, 1979b; Ramsbotham, 1980).

During its 1980 and 1982 legislative sessions the Virginia
General Assembly reaffirmed its commitment to the 1978 mandate
requiring high school students to demonstrate, through a uniform
statewide assessment measure, minimum competence in prescribed
skills as a criterion of eligibility for the award of a standard
diploma. Section 1 "Basic Skills" of the SOQ for the 1980-1982
biennium was expanded through the addition of Part C which established
general instructional program requirements related to the competency
testing mandate. Section C of the 1980-1982 SOQ states:

The program of instruction in grades seven through twelve
shall include activities to assist students to maintain the
basic skills and to develop at least minimum competence in the
following areas:

1. Reading, writing and speaking;
2. Mathematical concepts and computations;
3. Essential skills and concepts of citizenship; including
   knowledge of history and government, necessary for
   responsible participation in American society, and
   within the world community;
4. Knowledge and skills to qualify for further education
   and/or employment.
Special emphasis shall be given to instructional activities which improve the reading, writing, speaking, and mathematical skills of students (Commonwealth of Virginia 14, 1980, p. 2).


In order to receive a diploma from a public high school, a student shall earn the units of credit prescribed by the Board of Education and attain minimum competence in the areas established under Standard 1-C.

Attainment of reading and mathematics competencies established under Standard 1-C shall be demonstrated by means of tests prescribed by the Board of Education (Commonwealth of Virginia 14, 1980, p. 3).

The 1982 General Assembly further revised Part C of Section 2 "Testing and Measurement" for the 1982-1984 SOQ to more clearly reflect the direct relationship between the state competency testing program and the award of a standard high school diploma. Part C of Section 2 "Testing and Measurement" of the 1982-1984 SOQ states:

Each school division shall administer competency tests prescribed and provided by the Board of Education to those students desiring to earn a standard diploma. The tests shall be designed to measure minimum competence in reading and
mathematics established under Standard 1-C (Commonwealth of Virginia 3, 1982, p. 4).

While incorporating the provisions of Parts A, B, and C of Section 1 "Basic Skills of the 1980-1982 SOQ into the 1982-1984 SOQ, the General Assembly, during its 1982 legislative session, also expanded the provisions of Section 1 "Basic Skills" for the 1982-1984 SOQ through the addition of Part D which defines the relationship between the state competency testing program and the award of diplomas and certificates to high school students. The provisions of Section 1 "Basic Skills" Part D reads as follows:

1. To receive a standard diploma from a public high school, a student shall earn the units of credit prescribed by the Board of Education and attain minimum competence in the areas established under Standard 1-C. Attainment of reading and mathematics competencies established under Standard 1-C shall be demonstrated by means of tests prescribed by the Board of Education. Attainment of competencies in the other areas established under Standard 1-C shall be demonstrated to the satisfaction of local authorities through performance-related assessment.

2. To receive a special diploma from a public high school, a student shall be identified as handicapped, complete the units of credit prescribed by the Board of Education, and complete the requirements of the individualized education program. Handicapped students shall always have the opportunity to take competency tests.
3. To receive a certificate, a student shall complete a prescribed course of study as defined by the local school board. However, all students who have earned the units of credit required by the Board of Education and have not passed the competency tests shall be encouraged to retake and pass the minimum competency tests in order to receive a diploma.

4. On exiting from the public schools, all students who have received the units of credit required by the Board of Education or who, if identified as handicapped, have completed an individualized educational program but have not qualified for a diploma under sections 1 and 2 above, shall receive a certificate (Commonwealth of Virginia 23, 1982, p. 2-3).

A practical comparison of the Virginia GCT program with competency testing programs for high school students in other states suggests that the GCT program is similar to programs in fifteen states in terms of the following basic characteristics:

1. Testing program standards are mandated by the state.
2. Testing program standards are prescribed by a state agency.
3. Local school division participation in the testing program is required.
4. Subject areas tested include reading and mathematics.
5. Testing is linked to diagnosis, remediation and graduation.

However, the Virginia GCT program differs significantly from other
state MCT programs for high school students in that it requires
students to meet two sets of competency requirements: a basic
skills requirement administered by a state agency and a citizenship
and a higher education or employment requirement administered by
local education agencies (Corh and Perkins, 1979a; Impara, 1980;

**Summary**

The legal foundation for the adoption of a statewide program of
minimum competency testing in Virginia, as in most MCT states, is
based upon the provisions of the educational clause of the state
constitution. Acting within the provisions of the Constitution of
Virginia and the Code of Virginia, respectively, the General Assembly
and the Board of Education, in apparently related actions initiated,
during 1976, the development and implementation of two state minimum
competency testing programs: the Basic Learning Skills (BLS) program
for elementary and intermediate school students and the Graduation
Competency Test (GCT) program for high school students.

The award of a standard high school diploma as well as the award
of differential diplomas and certificates to both non-handicapped and
handicapped students in Virginia is linked directly to student per­
formance on the GCT. Students must pass both the reading and the math­
ematics sections of the GCT to be eligible for the award of a standard
diploma. Remedial programs for students who fail one or both sections
of the GCT are the responsibility of the local school divisions.

In many respects the Virginia GCT program is similar to MCT
programs in other states, however, the GCT differs significantly in further requiring that students meet locally developed criteria regarding citizenship and the pursuit of higher education or employment.
Section Four: Minimum Competency Testing of Handicapped Students in Virginia

Handicapped students in Virginia must meet the same GCT and units of credit criteria required of non-handicapped students to be eligible for a standard high school diploma. However, the provisions of the 1978-1980 SOQ which initially mandated the GCT requirement as a criterion for the award of a standard high school diploma in Virginia did not specify whether the GCT requirement was to apply to handicapped students. To clarify the apparent intent that the GCT criterion mandated by the 1978-1980 SOQ was to apply to handicapped students, the Virginia Department of Education (DOE), during the initial stages of the implementation of the GCT program introduced several brief policy statements regarding the position of the DOE with respect to:

1) the inclusion of handicapped students in the GCT program,

and

2) the relationship between the IEP and the skills assessed by the GCT.

Through attachments titled "Minimum Competencies and Handicapped Students" initial DOE policy statements regarding the GCT program and handicapped students were communicated to all local school divisions within the state through Superintendent's Memorandum Number 91 of September 20, 1978 (Appendix B) and Superintendent's Memorandum Number 22 of March 6, 1979 (Appendix B). The rationale for including
handicapped students in the GCT program was stated as follows:

A handicapping condition, by virtue of its presence and effect upon a student, does not, of itself, preclude the possibility that a student can achieve the competencies required for graduation. Many students who are handicapped are capable of average or above average achievement and learning ability. Therefore, to exclude all handicapped students from the minimum competency requirements would discriminate against those handicapped students who would be entitled to a regular diploma at graduation.

Also, federal regulations under the Rehabilitation Act of 1973, Section 504, require that handicapped individuals be given equal opportunity to participate in and benefit from the customary policies and procedures granted to all individuals (Commonwealth of Virginia 9, 1978, p. 5; Commonwealth of Virginia 26, 1979, p. 5).

The anticipated relationship between the skills assessed by the GCT and IEP annual goals and short-term objectives was outlined as follows:

It is understood that during the course of a student’s education there are to be preliminary evaluations to discern the extent of achievement a student is making toward meeting the requirements of minimum competencies for graduation. These evaluations should identify the student’s progress in achieving the competencies and areas of weaknesses. The IEP developed for a handicapped student should address the weaknesses the student
demonstrates and these weaknesses should be reflected in the long-range goals as well as the short-term objectives.

Recognizing the difficulties inherent in protecting the rights of handicapped students in coordinating a statewide program of minimum competency testing with federal and state mandates requiring the provision of individualized education programs for handicapped students, the DOE, Division of Special and Compensatory Education developed a more comprehensive document regarding the minimum competency testing of handicapped students in Virginia. This document, *Minimum Competencies and the Handicapped-Guidelines (MCHC-G)* (Appendix B) was approved by the Virginia Board of Education in 1980 and is viewed by the DOE as the primary guide for use by Virginia school personnel in coordinating the participation of handicapped students in the GCT program with the provision of appropriate individualized special educational programs (Harris, 1983 [Appendix B]).

The stated purpose of the MCHC-G document is "to assist Virginia's Local Education Agency (LEA) personnel, particularly teachers, administrators, counselors and test providers, in the implementation of the minimum competency program for handicapped students (Commonwealth of Virginia 4, 1980, p. 1)." The MCHC-G document "suggests procedures and special accommodations to be used in the preparation, testing, remediation and retesting of handicapped students (p. 1)" participating in the GCT program.

In suggesting procedures to be used in the minimum competency
testing of handicapped students the MCHC-G document addresses four of the five major current issues in the minimum competency testing of handicapped students:

1) exemptions of individual students from testing;
2) the provision of special accommodations in testing;
3) the relationship between the testing and the IEP; and
4) remediation.

Procedures for exempting individual handicapped students from participation in the GCT program are outlined in the MCHC-G document as follows:

If there is a possibility that the student may never be ready (to take the GCT), the parents and the student should be counseled that it is the right of the student to take the tests but that it may be more appropriate for the student not to take them. Also, the parents and the student must understand that such an exemption would make the student ineligible for a regular diploma, though it does allow the student the right to receive a certificate in recognition of his/her achievement and to participate in graduation exercises. It is the responsibility of the school division to document that the above information has been given to the parent(s) and the student. A written request to exempt the student from Minimum Competency Testing should be signed by the parent(s), and
student when appropriate, and kept on file by the school division (Commonwealth of Virginia 4, 1980, p. 6).

Modifications which are permitted in test scheduling, setting, format and equipment for accommodating handicapped students in the GCT program are also enumerated in the document. In addition, the MCHC-G specifies modifications which are permitted in the modality of test administration as well as those allowed for the recording of student test responses. In providing modifications in test administration for accommodating handicapped students in the GCT program the Department of Education has stressed that:

The purpose of the modifications is to ensure, insofar as possible, that each handicapped child receives maximum individual consideration of his or her handicap without changing the nature or integrity of the test (Commonwealth of Virginia 4, 1980, p. 8).

Although the provisions of the MCHC-G document which pertain to exemptions and accommodations of handicapped students in the GCT program are straightforward and clearly define DOE policy, the wording of the MCHC-G is less definitive in delineating DOE policy with respect to the following interrelated issues:

1. the function of the IEP in the GCT program,
2. the relationship between the skills assessed by the GCT and the development of IEP annual goals and short-term objectives; and
3. the locus of responsibility for planning and implementing remediation for handicapped students who fail the GCT.

For example, in referring to the function of the IEP in the GCT program the MCHC-G document appears to limit the function of the IEP to that of a scheduling mechanism. Under the heading "Function of the IEP in the Competency Program" the document states:

Decisions as to the scheduling of a handicapped student to take the competency tests and the selection of accommodations should be made during the IEP review session which precedes the spring Minimum Competency Testing program conducted by the State. This should be done early enough to permit adequate preparation of the student.

It is strongly recommended that this particular review session include not only the parent(s), the representative of the local school division, the student, and the student's special education teacher, but also the guidance counselor. The guidance counselor will have a record of the units of credit the handicapped student has earned. Working closely with the teacher(s), guidance personnel can assist greatly in appropriately scheduling the student to take the competency test (Commonwealth of Virginia 4, 1980, p. 7).

With regard to the relationship between the skills assessed by the GCT and the development of IEP annual goals and short-term objectives, the MCHC-G implies that a direct relationship between the skills assessed by the GCT and the development of IEP annual goals
and short-term objectives should be established and documented by local school division personnel. However, the wording of the MCHC-G on this topic is confusing and may well be interpreted as a "suggestion" to be incorporated or disregarded at the discretion of local school division personnel (Commonwealth of Virginia 27, 1982). Specifically, under the heading "Individualized Education Program (IEP)" the MCHC-G addresses the relationship between the IEP and the skills assessed by the GCT as follows:

Because the Individualized Education Program (IEP) mandated for all identified handicapped students is the management tool to ensure that they receive an appropriate education, it is imperative that the IEP specify when a student is eligible to take the Minimum Competency Tests. The IEP includes, but is not limited to the following:

1. A statement of the student's present level of educational performance;
2. Long-range goals and short-term objectives.

The IEP developed for a handicapped student should state the strengths and weaknesses that the student demonstrates. The area of difficulties the student experiences should be reflected in the long-range goals as well as the short-term objectives.

The goals and objectives in a student's IEP may be developed to emphasize the educational objectives of the Basic Learning Skills. This suggestion does not imply that IEPs should be
developed using the prescribed BLS objectives, but that such objectives should be used as a framework for understanding the basic skills to be learned by all students.

The proper insertion points for teaching necessary skills need to be identified in the IEPs of the handicapped students (Commonwealth of Virginia 4, 1980, p. 5).

The use of the word "should" in the following excerpt from the above quote:

The IEP developed for a handicapped student should state the strengths and weaknesses that the student demonstrates. The area of difficulties the student experiences should be reflected in the long-range goals as well as the short-term objectives.

might be interpreted that local school division personnel may determine whether student weaknesses in skills assessed by the GCT will actually be incorporated into the educational program outlined in the IEP.

In response to a request for clarification of the position of the DOE with respect to the relationship between the IEP and the skills assessed by the GCT, the DOE has stated:

The specific skills/objectives outlined in the minimum competency testing program are to serve as guideposts for teachers, parents and others in the development of the short-term objectives and annual goals for the student therein ensuring incremental progress toward achieving those skills outlined in the minimum
competency testing program to the extent the student is able to achieve and develop those skills (Jones, 1983 [Appendix B]). This statement of position is somewhat more definitive in communicating the intent that local school division personnel develop IEP annual goals and short-term objectives which are related to student performance on the skills assessed by the GCT.

In addressing the issue of remediation for handicapped students who fall one or both sections of the GCT the MCHC-C manual is less than definitive in reference to the development of a direct link between student performance on the skills assessed by the GCT and the instructional program outlined in the IEP. Under the heading "Remediation" of Section III, "Post Test Activities," the MCHC-C states:

The Minimum Competency Tests must not merely identify those students whose skills indicate that they cannot qualify for a high school diploma; they must also provide guidance for persons responsible for trying to improve those skills.

The tests are constructed in such a way that a performance skill profile of each individual student is generated. Upon receiving these skill profiles, LEAs are to make them available to teachers as quickly as possible. These will provide a basis for planning remediation for students who have not passed the test. Instruction to improve the deficient areas should become a part of the short-term objectives in the student's IEPs.

It is vital that this remediation be initiated as soon as possible after the minimum competency scores are made available.
to the school division, as one cannot assume that any student, including a handicapped one, will be able to master a skill quickly, just because the need has been identified (Commonwealth of Virginia 4, 1980, p. 12).

Again, the use of the word "should" ("Instruction to improve the deficient areas should become a part of the short-term objectives in the students' IEP") does not clearly indicate whether local school division personnel are expected, as a matter of policy, to incorporate student GCT skills weaknesses into the short-term objectives of the IEP as a means of documenting the planned provision of remedial assistance for handicapped students who have failed one or both sections of the GCT.

However, in response to a request for clarification on this matter the DOE has stated:

In those cases where a student has failed to achieve the criterion level of performance for any objective outlined in the minimum competency testing program, it is the position of the Department of Education that subsequent IEPs reflect in the goal statements and short-term objectives the instruction to be provided in order that a handicapped student may have a better opportunity to demonstrate achievement in those areas of weakness. Remediation in those areas in which the student demonstrated certain weaknesses may occur as part of the special education program or the remedial instruction provided in general education.
Summary

Handicapped students in Virginia are required to meet the same GCT and units of credit requirements as non-handicapped students to be eligible for a standard high school diploma. However, the failure to incorporate specific references to the applicability of the GCT criterion to handicapped students in either the 1978-1980 SOG or the 1980-1982 SPQ suggests that the protection of the rights of handicapped students in minimum competency testing may not have been adequately considered during the initial planning and implementation stages of the Virginia GCT program.

Although Virginia has developed a policy document which addresses major issues pertaining to the competency testing of handicapped students, the wording of the Minimum Competency and the Handicapped-Guidelines (MHHC-G) is weak in terms of presenting a clear delineation of DOE policy with respect to requiring LEA establishment and documentation a direct relationship between the skills assessed by the GCT and the development and content of the annual goals and short-term objectives of the IEPs of handicapped students who fail the GCT. The wording of the MHHC-G document is particularly weak with respect to:

1. the function of the IEP in coordinating the participation of handicapped students in the GCT program;
2. the relationship between the skills assessed by the GCT and IEP annual goals and short-term objectives; and
3. remediation for handicapped students who fail the GCT (does not clearly indicate that local school personnel are to
incorporate data of student's strengths and weaknesses in
the GCT skills into IEP statements of students' present level(s)
of educational performance, annual goals and short-term objectives.)

It would appear that a review of the wording and policies outlined
by the MCED-C; document is necessary to clarify the nature of the intended
relationship between the IEP and the Virginia GCT.

Chapter Summary

The emergence of MCT legislation in the states has evolved from
the interaction of a number of complex and interrelated social and
political factors. In general, state MCT legislation has been
enacted as a means of restoring confidence in the quality of public
education.

Critics, however, contend that the design of current state and
local MCT programs is based upon faulty assumptions and inadequate
technology. As a consequence critics of the MCT movement maintain
that the programs are fraught with serious and, as yet, unresolved
technical, ethical and legal problems.

Among the major unresolved issues is the relationship between
the IEPs of handicapped students and the skills assessed by state
MCT programs. Specifically, since: the skills assessed by MCTs are
the skills considered to be the essential elements of a quality basic
educational program which should be provided for all students; and
since: the IEP is the management mechanism for ensuring that handi-
capped students are provided an appropriate educational program; then:
for handicapped students who fail an MCT it appears reasonable to
expect that the establishment and documentation of a direct relationship between MCT skills and IEP annual goals and short-term objectives would be a rational extension of the intent of P.L. 94-142, Section 504 and the underlying remedial theme of MCT legislation.

Although the establishment of a direct and clearly defined relationship between the skills assessed by competency tests and the annual goals and the short-term objectives of the IEP is strongly advocated in the professional literature as a means of ensuring handicapped students of fair and meaningful opportunities to benefit from their placement in special education and such a relationship is clearly "suggested" in the MCII-C document, however, it is not readily evident whether such a relationship is clearly established as an operational reality in Virginia.
Chapter III

Methods

This chapter describes the population sample, the instrumentation, the procedures and the statistical analysis used in this study.

Population Sample

Computer records of the March, 1981 administration of the Virginia GCT were made available for use in this investigation by the Virginia Department of Education (DOE), Division of Research, Evaluation and Testing (DRET). The DRET records identified a total of 125 local school divisions in the state as having administered the March, 1981 GCT to handicapped high school students (Appendix C, Local School Divisions Administering March, 1981 GCT to Handicapped Students).

As depicted in Table 7, the DRET computer records identified 171 high schools in 93 of 125 divisions (Appendix C, Table A and Table M) as having administered the March, 1981 GCT to a total of 641 handicapped students classified as learning disabled (LD). The DRET records also identified 46 high schools in 34 of the 125 divisions (Appendix C, Table B and Table P) as having administered the March, 1981 GCT to a total of 119 handicapped students classified as emotionally disturbed (ED) (Table 7).
TABLE 7
March 1981 CCT Data Totals for Learning Disabled (LD) Emotionally Disturbed Student*

<table>
<thead>
<tr>
<th>Handicapped Student Classification</th>
<th>Students Tested</th>
<th>High Schools Administering CCT</th>
<th>Divisions Administering CCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>641</td>
<td>171</td>
<td>93</td>
</tr>
<tr>
<td>ED</td>
<td>119</td>
<td>46</td>
<td>36</td>
</tr>
</tbody>
</table>

*Constructed from Virginia Department of Education Division of Research, Evaluation and Testing March, 1981 CCT data (Appendix C, Table A and Table B)

The DRET records indicated that all of the 641 LD students and all of the 119 ED students who took the March, 1981 CCT failed to pass one or both sections of the test (Table 8).

TABLE 8
Pass/Fail Data for LD and ED Students Participating in March, 1981 CCT*

<table>
<thead>
<tr>
<th>Student Handicap Classification</th>
<th>Students Tested</th>
<th>Pass Math and Reading</th>
<th>Fail Math and Reading</th>
<th>Fail One Section/Pass One Section</th>
<th>Students Tested</th>
<th>Fail Math Only or Reading Only</th>
<th>Total Students</th>
<th>Failing One or Both CCT Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD (641)</td>
<td>550</td>
<td>0</td>
<td>217</td>
<td>333</td>
<td>91</td>
<td>861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(39.4%)</td>
<td>(60.5%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED (119)</td>
<td>98</td>
<td>0</td>
<td>56</td>
<td>42</td>
<td>21</td>
<td>119</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(57%)</td>
<td>(43%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table constructed from Virginia Department of Education, Division of Research, Evaluation and Testing Computer Records of March, 1981 CCT performance of handicapped students (Appendix C, Table A and Table B)
From the DRET computer records of the March, 1981 the names of a total of 406 LD and 50 ED students were selected as the population sample on the basis of the following criteria:

1) DRET computer record code identification of student as a March, 1981 GCT participant classified as either LD or ED;

2) DRET computer record of LD and ED student GCT performance score below the passing scaled score of 70 on either or both sections (reading, math) of the March, 1981 GCT.

These criteria were applied, whenever possible, to secure representation of students in grades 10, 11 and 12 in each high school which administered the March, 1981 GCT to LD and ED high school students.

As noted previously (Chapter 1, Limitations, p. 12), the blind choice selection of the sample population may have resulted in an unknown systematic bias in the sample population and may be viewed as a limitation of the study.

The IEPs which were examined in this study were requested through, collected and made available by the Division of Special Education Programs of the Department of Education (DOE) of the Commonwealth of Virginia. (The IEPs examined in this study were collected and made available in conjunction with a study of the document Minimum Competencies and the Handicapped-Guidelines which was conducted by the Division during 1981-1982 [Appendix D, SUPTS. MEMO No. 128, September 25, 1981].) Copies of the 1980-1981 and 1981-1982 IEPs of the sample population were requested from the local divisions by the Division of Special Education Programs.
through a letter to local school division special education administrators which identified each member of the student sample population in their respective divisions by:

1) last name and initials;

2) the name of the high school where the student took the March, 1981 GCT;

3) the student's handicap classification for the March, 1981 GCT (Appendix D, Initial IEP Request Letter).

The initial request for copies of the IEPs of the student sample population was followed four months later by a second request letter which also included student identification data.

Copies of 912 IEPs were requested from 93 local school divisions (406 LD 1980-1981 IEPs and 406 LD 1981-1982 IEPs [812] + 50 ED 1980-1981 IEPs and 50 ED 1981-1982 IEPs [100] = 912 IEPs). A total of 369 IEP copies were provided by 82 local school divisions. The data of Table 9 provides a breakdown of the number of IEP copies which were requested and the number of IEP copies which were received.

### TABLE 9

<table>
<thead>
<tr>
<th>Handicap Classification</th>
<th>1980-1981 IEPs Received/Requested</th>
<th>1981-1982 IEPs Received/Requested</th>
<th>Total IEPs Received/Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>135/406 (33%)</td>
<td>178/406 (43%)</td>
<td>313/812 (38%)</td>
</tr>
<tr>
<td>ED</td>
<td>23/50 (46%)</td>
<td>33/50 (66%)</td>
<td>56/100 (56%)</td>
</tr>
</tbody>
</table>

369/912 (40%)
A total of 230 LD students were represented by the 1980-1981 and the 1981-1982 IEPs which were received (Table 10). A total of 42 ED students were represented by the 1980-1981 and 1981-1982 IEPs which were provided by local school divisions (Table 10).

Of the 230 LD students represented by 313 IEPs, 83 LD students were represented by two IEPs; one (1) 1980-1981 IEP and one (1) 1981-1982 IEP (Table 10). As indicated in Table 10 there were 512 LD students represented by one 1980-1981 IEP only; 95 LD students were represented by one 1981-1982 IEP only. As indicated in Table 10, 14 ED students were represented by two IEPs; one (1) 1980-1981 IEP and one (1) 1981-1982 IEP. There were nine (9) ED students represented by one (1) 1980-1981 IEP only; 19 ED students were represented by one (1) 1981-1982 IEP only.

**TABLE 10**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>52/11 (49+3)</td>
<td>55/18 (45+18)</td>
<td>81</td>
<td>111 (130+81)</td>
</tr>
<tr>
<td>ED</td>
<td>32/1 (31+1)</td>
<td>19/3 (19+16)</td>
<td>14</td>
<td>56 (52+4)</td>
</tr>
</tbody>
</table>
The final criteria for the selection of 1980-1981 and 1981-1982 IEPs for examination in this study were as follows:

1) A match between DRET March, 1981 GCT computer record code of student handicap classification and IEP designation of student handicap classification;

2) An IEP date clearly indicating that 1980-1981 IEPs were written three months prior to March, 1981 administration of the GCT;

3) An IEP data clearly indicating that 1981-1982 IEPs were written at least two (2) months after the March, 1981 administration of the GCT and four months prior to the March, 1982 GCT;

4) An IEP document format which included distinct statements of students: Present Level(s) of Educational Performance; Annual Goals; and, Short-Term Objectives;

5) Clear legibility of the IEP copy.

The IEPs which were not selected for examination in this study (N=83; 71 LD, 12 ED) were rejected for the following reasons:

1) DRET/IEP student handicap classification match uncertain (16);

2) IEP dates indicating that IEPs were developed prior to established study time frames (23);

3) IEP date of development unclear (12);

4) IEP copy lacked Short-Term Objectives statements (8);

5) Poor legibility of IEP copy (14);

6) IEP indication that student had been returned to a regular class program during study time frames (1);
7) IEP indication of student grade placement below grade 10 (1);
8) IEP not among those requested (6);
9) IEP indication that student had left school or had dropped out of special education (1);
10) IEP developed by school personnel in another state (1).

A total of 242 IEPs representing 162 LD students from 79 of 93 local divisions (84.9%) which administered the March, 1981 GCT to LD students satisfied the final IEP selection criteria for this study (Table 11).

**TABLE 11**

<table>
<thead>
<tr>
<th>Total LD-IEPs Selected</th>
<th>LD Students</th>
<th>Divisions Represented/Divisions GCT-LD</th>
</tr>
</thead>
<tbody>
<tr>
<td>242</td>
<td>162</td>
<td>79/93 (84.9%)</td>
</tr>
</tbody>
</table>

*constructed from Virginia Department of Education, Division of Research, Evaluation and Testing, March, 1981 GCT data (Appendix C: Table C)*

As indicated in Table 12 a total of 106 of 135 LD 1980-1981 IEPs (78%) which were received from 88 of 123 high schools (71%) in 57 of 93 local divisions (61%) satisfied the final IEP selection criteria.
Table 12 provides the dates of the development of the 1980-1981 LD IEPs which were selected for examination in this study. All of the 1980-1981 LD IEPs selected for examination in this study were developed at least three (3) months prior to the March, 1981 GCT.

<table>
<thead>
<tr>
<th>Handicapped Student Category</th>
<th>Month/Year of 1980-1981 IEP Development</th>
<th>Number of IEPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>3-80</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4-80</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5-80</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>6-80</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>7-80</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8-80</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>9-80</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>10-80</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>11-80</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>12-80</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>104</td>
</tr>
</tbody>
</table>
Copies of the 1981-1982 IEPs of 126 LD students, representing 75% of the 1981-1982 LD-IEPs which were received from 112 of 151 high schools (74%) in 74 of 93 local divisions (79%), satisfied the final IEP selection criteria (Table 14).

**TABLE 14**

1981-1982 LD-IEPs Satisfying Final Selection Criteria

<table>
<thead>
<tr>
<th>Total 1981-1982 LD IEPs Selected/Received</th>
<th>High Schools Represented/High Schools GCT-LD</th>
<th>Division Represented/Divisions GCT-LD</th>
</tr>
</thead>
<tbody>
<tr>
<td>116/170 (73%)</td>
<td>112/151 (74%)</td>
<td>74/93 (79%)</td>
</tr>
</tbody>
</table>

*Constructed from Virginia Department of Education, Division of Research, Evaluation and Testing, March, 1981 GCT data (Appendix C; Table 7)*

The data of Table 15 provide the dates of the development of the 1981-1982 LD-IEPs which were selected for examination in this study. All of the 1981-1982 LD IEPs selected for examination were developed at least four (4) months prior to the March, 1982 GCT.
Of the 162 LD students represented by the 242 IEPs which satisfied the final selection criteria, 80 LD students were represented by two IEPs; one (1) 1980-1981 IEP and one (1) 1981-1982 IEP (Table 16). Twenty-six (26) LD students were represented by one (1) 1980-1981 IEP only and 56 LD students were represented by one (1) 1981-1982 IEP only (Table 16).

### TABLE 15

Data of 1981-1982 IEP Development

<table>
<thead>
<tr>
<th>Handicapped Student Category</th>
<th>Month/Year of IEP Development</th>
<th>Number of IEPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>4-81</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5-81</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>6-81</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>8-81</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>9-81</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>10-81</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>11-81</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>12-81</td>
<td></td>
</tr>
</tbody>
</table>

Total: 136

### TABLE 16

LD Students Represented by IEPs Satisfying Final Selection Criteria

<table>
<thead>
<tr>
<th>LD Students Represented by One (1) IEP Only</th>
<th>LD Students Represented by One (1) IEP Only</th>
<th>LD Students Represented by One (1) IEP Only</th>
<th>Total LD Students Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>56</td>
<td>80</td>
<td>162</td>
</tr>
</tbody>
</table>
The copies of 44 IEPs representing 32 ED students from 24 of 34 local divisions (70%) which administered the March, 1981 GCT to ED students also satisfied the final IEP selection criteria (Table 17).

**TABLE 17**

<table>
<thead>
<tr>
<th>Total ED IEPs</th>
<th>ED Students</th>
<th>Divisions Represented/Divisions GCT-ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>30</td>
<td>24/35 (70%)*</td>
</tr>
</tbody>
</table>

*Constructed from Virginia Department of Education, Division of Research, Evaluation and Testing, March, 1981 GCT data (Appendix C; Table H)

Of 23 ED 1980-1981 IEP copies which were received from 15 of 24 high schools (62%) in 13 of 34 divisions (38%), 18 (78%) satisfied the final IEP selection criteria (Table 18).

**TABLE 18**

<table>
<thead>
<tr>
<th>Total 1980-1981 ED-IEPs Selected/Received</th>
<th>High Schools Represented/High Schools GCT-ED</th>
<th>Divisions Represented/Division GCT-ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>18/23 (78%)</td>
<td>15/24 (62%)</td>
<td>13/35 (37)*</td>
</tr>
</tbody>
</table>

*Constructed from Virginia Department of Education, Division of Research, Evaluation and Testing, March, 1981 GCT data (Appendix C; Table I)
Table 19 provides the dates of the development of the 1980-1981 ED-IEPs which were selected for examination in this study. All of the 1980-1981 ED IEPs selected for examination were developed at least three (3) months prior to the March, 1981 GCT.

**Table 19**

<table>
<thead>
<tr>
<th>Handicapped Student Category</th>
<th>Month/Year of 1980-1981 IEP Development</th>
<th>Number of IEPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>4-80</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5-80</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6-80</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7-80</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8-90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9-90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10-90</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>11-90</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>12-90</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

The copies of 26 of 31 ED 1981-1982 IEPs (83%) which were provided by 25 of 35 high schools (65%) in 21 of 34 divisions (61%) satisfied the final IEP selection criteria (Table 20).
**TABLE 20**

1981-1982 ED-IEPs Satisfying Final Selection Criteria

<table>
<thead>
<tr>
<th>Total 1981-1982 ED-IEPs Selected/Received</th>
<th>High Schools Represented/High Schools CCT-ED</th>
<th>Divisions Represented/Divisions CCT-ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>26/31 (83%)</td>
<td>25/35 (71%)</td>
<td>21/35 (60%)</td>
</tr>
</tbody>
</table>

*Constructed from Virginia Department of Education, Division of Research, Evaluation and Testing, March, 1982; CCT data (Appendix C, Table F)*

The data of Table 21 provide the dates of the development of the 1981-1982 LD-IEPs which were selected for examination in this study. All of the 1981-1982 ED IEPs selected were developed four (4) months prior to the March, 1982 CCT.

**TABLE 21**

Data of 1981-1982 IEP Development

<table>
<thead>
<tr>
<th>Handicapped Student Category</th>
<th>Month/Year of 1981-1982 IEP Development</th>
<th>Number of IEPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>5-81</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4-81</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3-81</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4-91</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>10-PL</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>11-01</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>
Of the 30 ED students represented by the 44 IEPs which satisfied the final selection criteria, 11 ED students were represented by two IEPs; one (1) 1980-1981 IEP and one (1) 1981-1982 IEP (Table 22). Six (6) ED students were represented by one (1) 1980-1981 IEP only; 13 ED students were represented by one (1) 1981-1982 IEP only (Table 22).

Table 23 provides composite data regarding the IEPs which were examined in this study.

<table>
<thead>
<tr>
<th>Sample Students Represented</th>
<th>1980-1981 IEPs Examined</th>
<th>1981-1982 IEPs Examined</th>
<th>Total IEPs Examined</th>
<th>High Schools Represented</th>
<th>Divisions Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD 162</td>
<td>106</td>
<td>136</td>
<td>242</td>
<td>124/171 (72%)</td>
<td>79/93 (84.9%)</td>
</tr>
<tr>
<td>ID 50</td>
<td>14</td>
<td>26</td>
<td>44</td>
<td>26/46 (56%)</td>
<td>25/35 (72%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>82/93 (88.1%)</td>
</tr>
</tbody>
</table>

*52 Total Inclusions Represented by all 1980-1981 and 1981-1982 IEPs
Tables 24-29 provide the March, 1981 and March, 1982 CCT performance data of the LD and the ED students of the sample population represented by the 1980-1981 and 1981-1982 IEPs which satisfied the selection criteria for examination in this study.

The Mean Math Scaled Score data of Table 24 indicate that the CCT math performance of the ED students of the sample population improved from 60.4 (1981) to 66.8 (1982) and that the GCT math performance of the LD students of the sample population declined from 70.2 (1981) to 68.5 (1982). A scaled score of 70.0 is required to pass the mathematics section of the GCT.

TABLE 24
1981-1982 CCT Data Math

<table>
<thead>
<tr>
<th>GCT Date</th>
<th>Handicapped Student Classification</th>
<th>Total Students</th>
<th>Pass 1981 GCT Math</th>
<th>Fail 1981 GCT Math</th>
<th>Mean 1981 GCT Math Raw Score</th>
<th>Mean 1981 GCT Math Scaled Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>LD</td>
<td>92</td>
<td>50 (54.2%)</td>
<td>42 (45.8%)</td>
<td>66.2</td>
<td>70.2</td>
</tr>
<tr>
<td>1981</td>
<td>ED</td>
<td>17</td>
<td>6 (23.5%)</td>
<td>11 (76.5%)</td>
<td>50.5</td>
<td>60.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>109</td>
<td>56 (49.3%)</td>
<td>53 (50.7%)</td>
<td>63.0</td>
<td>68.7</td>
</tr>
<tr>
<td>March</td>
<td>LD</td>
<td>34</td>
<td>12 (35.3%)</td>
<td>22 (64.7%)</td>
<td>62.4</td>
<td>68.5</td>
</tr>
<tr>
<td>1982</td>
<td>ED</td>
<td>8</td>
<td>3 (37.5%)</td>
<td>5 (62.5%)</td>
<td>54.3</td>
<td>66.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42</td>
<td>15 (35.7%)</td>
<td>27 (64.3%)</td>
<td>60.9</td>
<td>68.1</td>
</tr>
</tbody>
</table>
The Mean Reading Scaled Score* data of Table 25 indicate that the performance of both the LD and the ED students of the sample population improved on the March, 1982 Reading-GCT ([LD-63.7 (1981), 69.2 (1982)]; [ED-61.3 (1981), 70.8 (1982)]).

**TABLE 25**

<table>
<thead>
<tr>
<th>GCT Date</th>
<th>Handicapped Student Classification</th>
<th>Total Students</th>
<th>Pass 1981 GCT Reading</th>
<th>Fall 1981 GCT Reading</th>
<th>Mean 1981 GCT Reading Score</th>
<th>Mean 1981 GCT Reading Scaled Score*</th>
</tr>
</thead>
<tbody>
<tr>
<td>March LD</td>
<td>103</td>
<td>14 (13%)</td>
<td>89 (86%)</td>
<td>35.3</td>
<td>63.7</td>
<td></td>
</tr>
<tr>
<td>March ED</td>
<td>16</td>
<td>3 (18%)</td>
<td>13 (81%)</td>
<td>32.6</td>
<td>61.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>119</td>
<td>17 (14.2%)</td>
<td>109 (85.7%)</td>
<td>35.0</td>
<td>63.4</td>
</tr>
<tr>
<td>March LD</td>
<td>81</td>
<td>42 (51%)</td>
<td>39 (48%)</td>
<td>39.4</td>
<td>69.2</td>
<td></td>
</tr>
<tr>
<td>March ED</td>
<td>17</td>
<td>9 (53%)</td>
<td>2 (25%)</td>
<td>61.8</td>
<td>70.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>93</td>
<td>51 (54.8%)</td>
<td>42 (45.1%)</td>
<td>39.7</td>
<td>69.4</td>
</tr>
</tbody>
</table>

Data of the performance of the 29 LD students of the sample population who took the mathematics section of the GCT in March of 1981 and again in March of 1982 are provided in Table 26.
As indicated in Table 26, only one (1) of the 29 LD students of the sample population passed the mathematics section of the GCT in March of 1981. In March of 1982, 10 of the 28 (35.7%) LD students of the sample population passed the mathematics section of the GCT. In contrast, 18 of the 28 (64.3%) LD students of the sample population failed the mathematics section of the GCT for a second time in March of 1982.

As shown in Table 27, only seven (7) of the ED students of the sample population took the mathematics section of the GCT in March of 1981 and in March of 1982.

**TABLE 26**

<table>
<thead>
<tr>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>55.3</td>
<td>63.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.7</td>
<td>66.7</td>
</tr>
</tbody>
</table>

As shown in Table 27, only seven (7) of the ED students of the sample population took the mathematics section of the GCT in March of 1981 and in March of 1982.

**TABLE 27**

<table>
<thead>
<tr>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.0</td>
<td>57.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>55.7</td>
<td>67.5</td>
</tr>
</tbody>
</table>
All seven (7) of the ED students failed to pass the mathematics section of the GCT in March of 1981. Each of the seven (7) ED students took the mathematics section of the GCT for a second time in March of 1982. The scaled scores of four (4) of the seven (7) (57.1%) ED students remained below the required passing scaled score of 70 on their second (March, 1982) attempt to pass the mathematics section of the GCT.

The performance data of the LD students of the sample population who took the Reading-GCT in March, 1981 and again in March, 1982 is provided in Table 28.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>61.6</td>
<td>0</td>
<td>68 (100%)</td>
<td>40.2</td>
<td>69.8</td>
<td>38 (55.8%) 30 (44.1%)</td>
</tr>
</tbody>
</table>

Of the 68 LD students of the sample population who took the reading section of the GCT in March, 1981 and again in March, 1982, 38 (55.8%) passed the reading section on their second attempt (March, 1982) and 30 (44.1%) failed in their second attempt (March, 1982).

The data of Table 29 indicates that not a single ED student (N=11) of the sample population who took the Reading-GCT in March of 1981 achieved a passing score.
TABLE 29
Performance of ED Students Taking 1981 Reading CCT and 1982 Reading CCT

<table>
<thead>
<tr>
<th>1981 Reading</th>
<th>1982 Reading</th>
<th>Fall 1981</th>
<th>Fall 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCT Raw Score</td>
<td>Scaled Score</td>
<td>CCTV</td>
<td>CCTV</td>
</tr>
<tr>
<td>37.0</td>
<td>62.0</td>
<td>0</td>
<td>11 (100%)</td>
</tr>
</tbody>
</table>

However, in March of 1982, on a second attempt to pass the reading CCT, nine (9) of the 11 (81.8%) ED students of sample population passed the reading CCT.

The Virginia Department of Education, Division of Research, Evaluation and Testing has suggested that Improvements in the CCT performance scores of handicapped students may be attributed to an increase in instructional emphasis upon the skills assessed by the CCT. However, at the time of the initiation of this study there was no data to support this contention.

The major objective of this study is to determine the extent to which the skills assessed by the CCT have been systematically incorporated into the annual goals and short-term objectives statements of the IEPs of handicapped students who have failed one or both sections of the CCT.

Instrumentation

The following sources and instruments were utilized to gather the CCT and IEP data which were examined in this study:

1) Virginia Department of Education, Division of Research

2) local division copies of the 1980-1981 and 1981-1982 IEPs of the sample population;

3) GCT-IEP Evaluation Form A (Appendix E) and GCT-IEP Evaluation Form B (Appendix E).

As noted earlier, a copy of the Virginia Department of Education (DOE) computer records of the March, 1981 GCT scores of handicapped students was made available by the Division of Research, Evaluation and Testing (DRET) for use in this study. These records provided the March, 1981 GCT reading and mathematics total test scores as well as the individual GCT reading skills (5) scores and the individual math skills (15) scores for each of the members of the sample population. All of the GCT scores provided by the DRET computer records were the same GCT scores which were reported to local school division personnel through the confidential Individual Skill Analysis (ISA) report of each student's performance on the reading and math skills which were assessed by the March, 1981 GCT. (A copy of the ISA form utilized by the DOE to report student performance on the March, 1981 GCT to local school personnel is provided in Appendix E.)

Copies of the 1980-1981 and 1981-1982 IEPs of the sample population were provided to the DOE by 82 of 93 (88%) local Virginia school divisions which had administered the March, 1981 GCT to handicapped high school students classified as either learning disabled (LD) or emotionally disturbed (ED). These IEP copies were
made available for examination in this study by the DOE, Division of Special Education Programs.

An associate professor of special education at a state supported university in Virginia, a special education program specialist from a public school division in Virginia, and a high school special education teacher from a local public school division in Virginia served as Independent judges in this study.

The instruments used to evaluate the GCT content of the IEPs of the sample population were developed by the researcher. Aside from reflecting the advocacy expressed in the literature for establishing a direct relationship between the skills assessed by a minimum competency test and the content of the IEP, all of the evaluation items were constructed to reflect the following references in the DOE document *Minimum Competencies and the Handicapped-Guidelines (MCHC-G)*:

1) The Minimum Competency Tests must not merely identify those students whose skills indicate that they can not qualify for a high school diploma; they must also provide guidance for persons responsible for trying to improve those skills (p. 12).

2) Handicapped students must be adequately prepared to take the Minimum Competency Tests (p. 6).

3) Instruction should be planned to ensure that information and skills related to minimum competencies are included as an integral part of the special education program (p. 4).

4) Teachers should be requested to identify content and teaching
strategies which relate to the competency program (p. 4).

5) Data obtained from the MCI by special education teachers should be used in their planning of individual or small-group work with their students (p. 4).

6) The IEP developed for a handicapped student should state the strengths and weaknesses that the student demonstrates. The area of difficulties the student experiences should be reflected in the long-range goals as well as the short-term objectives (p. 5). (Author's emphasis)

7) The (CCT) tests are constructed in such a way that a performance skill profile of each individual student is generated. These will provide a basis for planning remediation for students who have not passed the test. Instruction to improve the deficient areas should become a part of the short-term objectives of the student's IEP (p. 12).

(Author's emphasis)

The initial evaluation instruments were independently examined for scoring format and item clarity by the three independent judges. Changes suggested by the judges were made to enhance item clarity and to improve the format of the evaluation instrument.

The three judges used the revised instruments in a trial run to independently evaluate ten (10) 1980-1981 and ten (10) 1981-1982 IEPs of the sample population. The judges were given the following directions:
Utilizing the attached GCT-IEP Study Form, which provides the student's scores on the March, 1981 GCT, carefully examine each IEP for specific references to the GCT data and use your professional judgement to determine whether the GCT data is incorporated into the IEP.

For both evaluation forms, if no GCT score is indicated for a test on the GCT-IEP Study Form assume that the student had taken and passed that test at some previous time and mark N/A for all evaluation items pertaining to that skill area.

For evaluation Form A only, if a GCT score is designated a passing score on the GCT-IEP Study Form evaluate each of the items for that skill area as if the score were designated a failing score.

For evaluation Form B only, if a GCT score on the GCT-IEP Study Form is designated a passing score indicate N/A for all evaluation items related to that topic.

The responses of the judges to the evaluation items on both instruments were subjected to an analysis of inter-judge reliability utilizing the Reliability Analysis Program of the Statistical Package for the Social Sciences, Update 7-9 (1981) with the Prime 400/500 Computer. The inter-judge coefficient of reliability for the instrument used to evaluate 1980-1981 IEPs was .89 (Table 30). The inter-judge coefficient of reliability for the instrument used in evaluating the 1981-1982 IEPs was .83 (Table 30).
TABLE 10
Inter-Judge Reliability Trial Run

<table>
<thead>
<tr>
<th>GCT-IEP Form</th>
<th>Inter-Judge Coefficient of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (1980-1981 IEPs)</td>
<td>.89</td>
</tr>
<tr>
<td>B (1981-1982 IEPs)</td>
<td>.81</td>
</tr>
</tbody>
</table>

Discussions with the judges after the trial run evaluation and the levels of the inter-judge reliability coefficients indicated that GCT-IEP Evaluation Form A (Appendix E) and GCT-IEP Evaluation Form B (Appendix E) were satisfactory for use in evaluating the GCT content of the IEPs of the sample population.

Procedures

All student and school division identification data were deleted from the copies of the IEPs of the student population and the GCT total test scores and individual skills scores of each member of the sample population were recorded on the GCT-IEP Data Form (Appendix E) and attached to the students' IEPs. These scores were used as a reference for evaluating the extent to which GCT data were incorporated into the statements of the present levels of educational performance, annual goals and short-term objectives of the IEPs of the sample population.

GCT-IEP Evaluation Form A and GCT-IEP Evaluation Form B (Appendix E) each with an attached GCT Data Form (Appendix E) were used by the three (3) independent judges to evaluate the GCT content
of the 1980-1981 and 1981-1982 IEPs of the handicapped student sample population. The judges independently evaluated each of the 286 IEP statements of students' present level(s) of educational performance, annual goals and short-term instructional objectives, to determine the extent to which local school division personnel in Virginia had documented, in writing, the planning of individualized special educational programs designed to:

1. ensure that information and skills related to the GCT are included as an integral part of the special education programs provided for Individual LD and ED high school students; and

2. assist LD and ED students to improve their identified deficiencies in the reading and mathematics skills assessed by the GCT.

The responses of the judges for each item on the evaluation forms were coded as follows: 0 = no/not present; 1 = yes/present; 2 = GCT section taken and passed in March, 1981, no response required for items pertaining to that evaluation section; 3 = no response; 4 = GCT section not taken in March, 1981 or March, 1982. Final assignment of a response code for each evaluation item required agreement of two of the three judges' independent responses.

Response codes and related GCT data for each IEP were then transferred to computer cards for statistical analysis.
Statistical Analysis

The data pertaining to the five hypotheses were analyzed with the IBM 360 computer through the procedures of the Subprogram Frequencies and Subprogram Crosstabs of the Statistical Package for the Social Sciences (SPSS) (1975).

The SPSS Subprogram Frequencies was used to obtain a one-way frequency distribution of the CCT-IEF data as well as the means of the raw and scaled GCT scores of the student sample population.

The SPSS Subprogram Crosstabs was used to obtain a contingency table for the GCT-IEF evaluation data.

Chapter Summary

A total of 456 (406 LD + 50 EP) of the 760 LD and ED students (641 LD + 119 ED) who failed to pass at least one section of the March, 1981 GCT were selected through a process of blind choice to serve as the sample population for this study. Copies of the 1980-1981 and 1981-1982 IEPs of each member of the sample population were requested from the students' local school divisions through the Division of Special Education Programs of the Virginia Department of Education.

Copies of 369 IEPs representing 272 of the 456 students (59%) of the sample population were provided by 82 local school divisions. After screening, 286 of the IEPs representing 192 handicapped students (162 LD + 30 EP) were selected for evaluation in this study.

Instruments developed by the researcher were used by three independent judges to evaluate the extent to which local school
personnel in Virginia had systematically incorporated the skills assessed by the CCT into the IEPs of LD and ED students who had failed one or both sections of the March, 1981 CCT.
Chapter IV

Results

Four of the five hypotheses which were developed for this study did not require contrasts of student groups or student test scores. Consequently, acceptance or rejection of the first four hypotheses was not based upon traditional statistical analysis. Rather, acceptance or rejection of the initial four hypotheses was based upon reasonable conclusions drawn from an examination of data frequency distributions and percentages.

The first phase of the analysis of the data gathered for this study was limited to an examination of the judges' independent evaluations of the 1980-1981 IEPs of the sample population. The purpose of this examination was to establish a reference baseline for developing reasonable conclusions from an analysis of the 1981-1982 IEP data with respect to each of the five research hypotheses.

The purpose of the judges' evaluations of the 1980-1981 IEPs was to determine whether the 1980-1981 IEP annual goal and short-term objective statements documented the development of educational programs designed to ensure that handicapped students would be provided systematic exposure to instructional programs covering GCT skills prior to the March, 1981 administration of the GCT. For this evaluation it was assumed that the students of the sample population had not taken the GCT prior to March of 1981. Therefore, citation of students' GCT scores and specific GCT skills' weaknesses
were not expected to be present in the 1980-1981 IEP statements of
students' present level(s) of educational performance. However, on
the basis of the guidelines provided in Superintendent's Memorandum
Number 91 of September 20, 1978 and Superintendent's Memorandum
Number 22 of March 6, 1979, both of which outlined an intended relation-
ship between the GCT and the IEP, it appeared reasonable to expect
that 1980-1981 IEP annual goal statements would indicate anticipated
student performance on the March, 1981 GCT and that the short-term
objectives in reading and math of 1980-1981 IEPs would cite specific
GCT reading and math skills to be incorporated into the students'
educational programs.

The data of Table 31 indicate that the 1980-1981 IEPs of the
sample population did not meet these expectations. For example, in
109 of 122 (89.3%) cases involving IEPs from 43 of 54 school divisions
(79.6%), the 1980-1981 IEPs of the sample population contained no
annual goal statement referring to anticipated student performance
on the 1981 Reading GCT. Similarly, in 105 of 118 (88.9%) cases
involving IEPs from 40 of 51 school divisions (78.4%), the 1980-1981
IEPs of the sample population contained no annual goal statement
referring to anticipated student performance on the 1981 Math GCT.
Furthermore, GCT Reading and GCT Math skills were not cited in the
1980-1981 IEP short-term instructional objectives statements in more
than 70% of the instances in which it was reasonable to expect such
statements.

In short, the data of Table 31 indicate that 70%+ of the 1980-
TABLE 31

1980-1981 IEP-GCT Annual Goal and Short-Term Objectives Statements

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1981 annual goal statement of anticipated student performance on the 1981 Reading GCT</strong></td>
<td>N = 122  13 (10.6%)  109 (89.3%)  (DIV = 6)  (DIV = 15; 20.3%)  (DIV = 6)  (DIV = 28.6%)</td>
</tr>
<tr>
<td><strong>GCT reading skills cited in 1981 IEP Reading short-term objectives statement</strong></td>
<td>90 (74.2%)  57 (17.4%)  15 (12.4%)  (DIV = 26; 40.7%)  (DIV = 21; 55.2%)</td>
</tr>
<tr>
<td><strong>1981 annual goal statement of anticipated student performance on the 1981 Math GCT</strong></td>
<td>N = 68  13 (19.1%)  55 (87.1%)  (DIV = 6)  (DIV = 11; 16.2%)  (DIV = 40; 60.4%)</td>
</tr>
<tr>
<td><strong>GCT Math skills cited in 1981 IEP Math short-term objectives statement</strong></td>
<td>33 (48.5%)  35 (51.5%)  25 (37.3%)  (DIV = 30; 44.4%)  (DIV = 31; 46.7%)</td>
</tr>
</tbody>
</table>

*2 cases-No data concerning whether GCT Reading was taken; cases dropped from the phase of analysis.

**4 cases-No data concerning whether GCT Math was taken; cases dropped from this phase of analysis.

1981 IEPs of the sample population which were provided by 56 Virginia local school divisions did not contain annual goals statements related to anticipated student performance on the 1981 GCT and 55% of those 1980-1981 IEPs cited no short-term objectives statements related to the reading and mathematics skills assessed by the GCT. In addition, as indicated in Table 32, GCT skills were rated as not likely to have served as a guide in the development of the 1980-1981 IEP annual goals and short-term objectives in 108 of 126 cases (87.0%) involving IEPs from 44 of 56 school divisions (78.5%).
The data of Table 32 also indicate that over 80% of the educational programs outlined in the 1980-1981 IEPs were judged as not likely to have prepared the students of the sample population for the March, 1981 GCT.

As indicated by the data of Table 31 and the data of Table 32, it is clear that in an overwhelming majority of cases the 1980-1981 IEPs developed for the LD and the ED students of the sample population did not indicate whether the students would be provided systematic exposure to instructional programs which covered the reading and mathematics skills assessed by the GCT.

The second phase of the analysis of the data of this study involved an examination of the frequency distributions and percentages regarding parallel 1981-1982 IEP-GCT data and contrasts of such data with the 1980-1981 IEP-GCT data in formulating reasonable conclusions with respect to the acceptance or rejection of the first four of the five hypotheses which were developed as the basis for this research.
The first hypothesis of this study stated that students' GCT scores and students' specific weaknesses in the reading and mathematics skills assessed by the GCT are not being incorporated into IEP statements of handicapped students' present levels of educational performance. The data of Table 33 indicate that in 133 of 162 (82.1%) cases involving the IEPs of the sample population from 54 of 76 school divisions (71.0%), students' 1981 GCT performance scores were not cited in the 1982 IEP statements of the students' present level(s) of educational performance. The data of Table 33 also indicate that in 135 of 137 (98.5%) cases, students' specific weaknesses in the reading skills assessed by the 1981 GCT were not cited in the state-

### Table 33

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1981 GCT Performance</strong></td>
<td>164</td>
<td>133</td>
</tr>
<tr>
<td>scores cited</td>
<td>(Div = 76)</td>
<td>(Div = 82.1)</td>
</tr>
<tr>
<td><strong>1981 GCT Reading skills</strong></td>
<td>137</td>
<td>2</td>
</tr>
<tr>
<td>weaknesses cited</td>
<td>(Div = 68)</td>
<td>(Div = 1.4)</td>
</tr>
<tr>
<td><strong>1981 GCT Math skills</strong></td>
<td>74</td>
<td>4</td>
</tr>
<tr>
<td>weaknesses cited</td>
<td>(Div = 46)</td>
<td>(Div = 5.1)</td>
</tr>
</tbody>
</table>

*20 cases - Reading GCT passed prior to the development of the 1982 IEP; citation of GCT Reading weaknesses not expected; cases dropped from this phase of analysis.

*3 cases - No data available concerning whether student had taken the Reading GCT; cases dropped from this phase of analysis.

**50 cases - Math GCT passed prior to the development of the 1983 IEP; citation of GCT Math weaknesses not expected; cases dropped from this phase of analysis.

*5 cases - No data available concerning whether student had taken the Math GCT; cases dropped from this phase of analysis.
ments of the students' present level(s) of educational performance in the 1981-1982 IEPs of 64 of 66 school divisions (96.9%). Furthermore, the data indicate that in 74 of 76 (94.8%) cases students' specific weaknesses in the math skills assessed by the 1981 GCT were not cited in statements of students' present level(s) of educational performance in the 1981-1982 IEPs of 42 of 46 school divisions (91.3%).

Although references to students' GCT scores and specific GCT skills weaknesses were not expected to be a part of the statements of students' present levels of educational performance statements of the 1980-1981 IEPs, after students had taken and failed either or both sections of the GCT in March of 1981, on the basis of the relationship between the GCT and the IEP outlined in the 1980 Department of Education document *Minimum Competencies and the Handicapped-Guidelines (MCHC-G)*, it appeared reasonable to expect that the 1981-1982 IEPs of the sample population would cite students' GCT scores and specific weaknesses in statements of students' present level(s) of educational performance.

On the basis of the data of Table 33, the hypothesis that students' GCT scores and students' specific weaknesses in the reading and mathematics skills assessed by the GCT are not being systematically incorporated into the IEP statements of handicapped students' present level(s) of educational performance is accepted.

The second hypothesis of this study was that IEP annual goal statements for handicapped students who have failed one or both sections of the GCT do not refer to anticipated student performance
on a future GCT. The data of Table 34 indicate that in 113 of 137 cases (82.4%) in which it was reasonable to expect an annual goal statement of students' anticipated performance on the reading section of the 1982 GCT or other future GCT, there was no such annual goal statement. The data of Table 34 also indicate that in 65 of 78 cases (83.3%) in which such a statement was expected, the annual goal statements of the 1981-1982 IEPs from 36 of 46 (78.2%) school divisions did not cite students' anticipated performance on the mathematics section of the 1982 GCT or other future GCT.

### Table 4

**1982 IEP Annual Goal Citation of Anticipated Student Performance on a Future GCT**

(Total IEPs Examined = 162)
(Total School Divisions Represented = 78)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1982 IEP annual goal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>statement of anticipated student performance on the 1982 Reading GCT or any future Reading GCT</td>
<td>113 (82.4%)</td>
<td>24 (17.6%)</td>
</tr>
<tr>
<td><strong>1982 IEP annual goal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>statement of anticipated student performance on the 1982 Math GCT or any future Math GCT</td>
<td>65 (83.3%)</td>
<td>13 (16.6%)</td>
</tr>
</tbody>
</table>

*20 cases: Reading GCT passed prior to the development of the 1982 IEP; citation of GCT Reading weaknesses not expected; cases dropped from this phase of analysis.

5 cases: No data available concerning whether student had taken the Reading GCT; cases dropped from this phase of analysis.

**469 cases: Math GCT passed prior to the development of the 1982 IEP; citation of GCT Math weaknesses not expected; cases dropped from this phase of analysis.

15 cases: No data available concerning whether student had taken the Math GCT; cases dropped from this phase of analysis.
Although the 1980-1981 IEPs of the sample population were expected to contain annual goal statements pertaining to the GCT, the data of Table 33 (p. 143) indicate that in 70% of the 1980-1981 IEPs examined there were no annual goal statements related to students' anticipated performance on the GCT or to students' specific weaknesses on the skills assessed by the CCT. The data of Table 34 indicate that even after the students of the sample population had taken and failed one or both sections of the 1981 GCT, there were no annual goals statements pertaining to the anticipated performance of the students on another GCT in more than 80% of the 1981-1982 IEPs which were examined. The data of Table 34, therefore, support the acceptance of the hypothesis that the 1982 IEP annual goal statements for handicapped students who had failed one or both sections of the 1981 GCT did not refer to anticipated student performance on a future GCT.

The third hypothesis of this study stated that the reading and math skills assessed by the GCT are not being incorporated into the short-term instructional objectives of the IEPs of handicapped students who have failed one or both sections of the GCT. As indicated in Table 35, GCT reading skills were not cited in the 1982 IEP short-term objectives in 95 of 137 (69.3%) instances in which it was reasonable to expect that GCT reading skills were not rated as likely to have served as the basis for the development of the short-term reading objectives which were
TABLE 35
1982 IEP Short-Term Objectives Incorporation of GCT Reading and Math Skills

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCT Reading skills cited</td>
<td>42 (30.6%)</td>
<td>95 (69.4%)</td>
</tr>
<tr>
<td>short-term objectives</td>
<td>(Div = 65)</td>
<td>(Div = 30; 51.5%)</td>
</tr>
<tr>
<td></td>
<td>(Div = 35; 48.4%)</td>
<td></td>
</tr>
<tr>
<td>GCT Reading skills rated as</td>
<td>17 (12.4%)</td>
<td>129 (87.6%)</td>
</tr>
<tr>
<td>the basis for the development</td>
<td>(Div = 11; 19.8%)</td>
<td>(Div = 33; 50.3%)</td>
</tr>
<tr>
<td>of IEP Reading short-term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCT Math skills cited</td>
<td>29 (37.1%)</td>
<td>48 (62.9%)</td>
</tr>
<tr>
<td>short-term objectives</td>
<td>(Div = 66)</td>
<td>(Div = 18; 35.1%)</td>
</tr>
<tr>
<td></td>
<td>(Div = 28; 60.6%)</td>
<td></td>
</tr>
<tr>
<td>GCT Math skills rated as</td>
<td>12 (15.3%)</td>
<td>64 (84.6%)</td>
</tr>
<tr>
<td>the basis for the development</td>
<td>(Div = 13; 25.2%)</td>
<td>(Div = 33; 71.7%)</td>
</tr>
<tr>
<td>of IEP Math short-term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>objectives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*20 cases—reading GCT passed prior to the development of the 1982 IEP; citation of GCT Reading weaknesses not expected; cases dropped from this phase of analysis.

5 cases—no data available concerning whether student had taken the Reading GCT; cases dropped from this phase of analysis.

**69 cases—Math GCT passed prior to the development of the 1982 IEP; citation of GCT Math weaknesses not expected; cases dropped from this phase of analysis.

15 cases—no data available concerning whether student had taken the Math GCT; cases dropped from this phase of analysis.

cited in the 1981-1982 IEPs of 53 of 66 school divisions (80.3%) (Table 35).

The data of Table 35 also indicate that GCT math skills were not cited in the short-term math objectives in 49 of 78 (62.8%) 1982 IEPs in which it was reasonable to expect such a citation. In addition, in 66 of the 76 cases (84.6%), the GCT math skills were
not viewed as the probable basis for the development of the short-term math objectives which were cited in the 1981-1982 IEPs of 33 of 46 (71.7%) local Virginia school divisions.

Just as the data of Table 31 (p. 141) indicate that in more than 70% of the 1980-1981 IEPs examined there were no short-term instructional objectives statements incorporating the reading and mathematics skills assessed by the GCT, the data of Table 35 indicate that, even after students had taken and failed one or both sections of the 1981 GCT, in more than 60% of the cases examined the short-term instructional objectives statements of the 1982 IEPs of the sample population did not incorporate GCT reading or mathematics skills. Consequently, it is reasonable to accept the hypothesis that the reading and math skills assessed by the 1981 GCT were not incorporated into the short-term instructional objectives of the 1982 IEPs of handicapped students who failed one or both sections of the 1981 GCT.

Table 36 provides data which further supports the acceptance

---

Table 36

<table>
<thead>
<tr>
<th>Judges Evaluations of Relationship Between the GCT and 1982 IEPs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>(Total 1981-1982 IEPs Examined = 162)</td>
</tr>
<tr>
<td>(Total School Divisions Represented = 76)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GCT skills serve as guide to development of the 1982 IEPs (N = 162)</td>
</tr>
<tr>
<td>(Div = 30; 30.4%)</td>
</tr>
<tr>
<td>(Div = 48; 60.5%)</td>
</tr>
<tr>
<td>1982 IEP indicate instructional programs designed to prepare students for 1982 GCT (N = 162)</td>
</tr>
<tr>
<td>(Div = 30; 30.4%)</td>
</tr>
<tr>
<td>(Div = 48; 60.5%)</td>
</tr>
</tbody>
</table>
of hypotheses 1, 2, and 3. The data in Table 36 indicate that the three independent judges rated the skills assessed by the 1981 CCT as not likely to have served as a guide in the development of 1982 IEPs in 127 of 162 cases (78.3%) in 46 of 76 school divisions (60.5%). Furthermore, in 132 of 162 (81.4%) cases involving 49 of 76 school divisions (64.4%) the judges rated the 1981-1982 IEPs as not likely to have ensured that students would have been provided instructional programs which could reasonably have been expected to have prepared the students for the 1982 CCT.

The fourth hypothesis developed for this research stated that IEPs developed by local school division personnel in Virginia do not clearly identify the school personnel expected to be responsible for the provision of CCT-related instructional programs to handicapped students who have failed one or both sections of the CCT.

The data of Table 37 indicates that 85% of the 1981 and 1982 IEPs which were examined did not identify the school personnel

<table>
<thead>
<tr>
<th>TABLE 37</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instructional Personnel</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1981 IEPs (N = 124)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>(94% = 56)</td>
<td>16 (13.2%)</td>
<td>110 (86.8%)</td>
</tr>
<tr>
<td>(21% = 10; 17.8%)</td>
<td>(21% = 44; 82.2%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1982 IEPs (N = 143)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>(94% = 76)</td>
<td>20 (13.9%)</td>
<td>143 (86.1%)</td>
</tr>
<tr>
<td>(21% = 15; 21.0%)</td>
<td>(21% = 65; 79.0%)</td>
<td></td>
</tr>
</tbody>
</table>
responsible for the provision of GCT-related instructional services.

It is reasonable, therefore, to accept the hypothesis that the 1981-1982 IEPs of handicapped students in Virginia did not identify the school responsible for the provision of GCT-related instructional programs for handicapped students who have failed one or both sections of the GCT.

The fifth hypothesis of this study stated that revisions of 1930-1981 IEPs which incorporated GCT skills weaknesses into 1981-1982 IEP statements of annual goals and short-term objectives would be positively related to student performance on a subsequent GCT. The analysis of the data for a decision concerning acceptance or rejection of this hypothesis required an examination which compared 1980-1981 IEP and 1981-1982 IEP content in terms of the GCT skills references of annual goal and short-term objectives statements as well as a comparison of students' 1981 and 1982 GCT scores. However, although all students must pass both sections of the GCT at some point during their high school programs as a criterion of eligibility for the award of a standard high school diploma, students are not required to take the GCT annually. The data which were available for analysis in developing a conclusion regarding acceptance or rejection of the fifth hypothesis are provided in Table 38.

As shown by Table 38 only 80 students of the sample population were represented by both a 1980-1981 and a 1981-1982 IEP and only 60 of these students took one or both sections of the GCT in March of 1981 and in March of 1982. As a consequence, the data which were available
for analysis were insufficient for developing a reasonable conclusion with respect to acceptance or rejection of the hypothesis that 1980-1981 IEP revisions which incorporated GCT skills weaknesses into 1981-1982 IEP statements of annual goals and short-term objectives were positively related to student performance on the March, 1982 GCT.
Chapter Summary

The data of the 1980-1981 (N=124) and 1981-1982 (N=162) IEPs developed for the handicapped students of the sample population (N=192; 162 LD + 30 ED) were examined to determine the extent to which local school division personnel in Virginia had documented, in writing, the planning of individualized special educational programs which could reasonably be expected to:

1. ensure that information and skills related to the GCT are included as an integral part of the special education programs provided for individual LD and ED high school students; and
2. assist LD and ED students to improve their identified deficiencies in the reading and mathematics skills assessed by the GCT.

Specifically, data were gathered and examined to develop conclusions with respect to acceptance or rejection of hypotheses that:

1. students' GCT scores and specific weaknesses in the skills assessed by the GCT are not being incorporated into IEP statements of the present level(s) of the educational performance of handicapped students;
2. IEP annual goal and short-term objectives statements for handicapped students who fail either or both sections of the GCT do not address the students' weaknesses in the skills assessed by the GCT;
3. student performance in a second attempt to pass the GCT is
positively related to IEP revisions which address students' weaknesses in the skills assessed by the GCT.

The analysis of the data of the 1980-1981 and 1981-1982 IEPs supported the acceptance of the hypothesis that the IEP statements of handicapped students' present level(s) of educational performance and annual goal and short-term objectives statements developed by local school division personnel in Virginia have not addressed students' identified weaknesses in the skills assessed by the GCT.

The fact that students are not required to take the GCT on an annual basis precluded securing sufficient data upon which to determine whether IEP revisions which addressed students' identified weaknesses in the skills assessed by the GCT are positively related to student performance on a subsequent GCT.

<table>
<thead>
<tr>
<th>GCT-IEP Form</th>
<th>Inter-Judge Coefficient of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (1980-1981 IEPs)*</td>
<td>.76</td>
</tr>
<tr>
<td>B (1981-1982 IEPs)*</td>
<td>.87</td>
</tr>
</tbody>
</table>

*Random sample, N = 50
The fact that students are not required to take the GCT on an annual basis precluded securing sufficient data upon which to determine whether IEP revisions which addressed students' identified weaknesses in the skills assessed by the GCT are positively related to student performance on a subsequent GCT.
Chapter V
Summary, Conclusions, and Recommendations

A major purpose of most state and local MCT programs developed during the 1970's, is to ensure that students who are awarded a standard high school diploma have achieved a minimum level of proficiency in specified basic educational skills. However, the extent to which handicapped students are being provided adequate and systematic opportunities to benefit from the provision of instructional programs which incorporate the skills assessed by state and local MCT programs is highly suspect. Gallagher and Hall (1979) have succinctly expressed the reservations of many special educators regarding the relationship between MCT programs and the educational programs provided for handicapped students in the following manner:

If MCT skills are deemed important to function in the mainstream why haven't public schools incorporated them into their special education curricula? (p. 71)

Although special educators have strongly advocated the establishment of a direct relationship between the IEP and the skills assessed by MCTs as a legal, rational and ethical means of assuring that handicapped students will be provided fair and meaningful opportunities to benefit from instructional programs which clearly address MCT skills, a review of the literature on minimum competency testing of handicapped students strongly suggests that such a relationship has yet to be clearly established either as policy or as an
operational reality in states which have implemented MCT programs.

The Department of Education of the Commonwealth of Virginia, through the publication of the document *Minimum Competencies and the Handicapped-Guidelines*, has taken a major positive step to convey an intent that local school division personnel in Virginia are to incorporate the skills assessed by the Virginia Graduation Competency Test (GCT) into the special education programs of handicapped high school students on a case-by-case basis. However, the findings of this investigation indicate that a direct and systematic relationship between the skills assessed by the GCT and IEP annual goals and short-term objectives can not be documented in the 1980-1981 or 1981-1982 IEPs (N=286) of a sample population of handicapped students (N=192; 162 LD + 30 ED) from 82 Virginia school divisions. In short, the findings of this investigation strongly suggest that local school personnel in the Commonwealth of Virginia have not established a direct relationship between the skills assessed by the GCT and the annual goals and short-term objectives of the IEP.

The failure of local school personnel to document the provision of fair and meaningful opportunities for handicapped students to benefit from educational programs which incorporate basic educational skills may infringe upon the due process and equal protection rights of handicapped high school students in Virginia. The ethical and legal implications of the possibility of such a failure, even though inadvertent, should not be long ignored.

To more adequately ensure the establishment of a direct
relationship between the skills assessed by the GCT and the annual goals and short-term objectives of the educational programs outlined in the IEPs of handicapped high school students in Virginia the following recommendations are warranted:

1. Revision of the Individualized Education Program (IEP) and the Function of the IEP in the Competency Programs sections of the MCHC-G document to more clearly and forcefully outline a direct relationship between the IEP and the GCT.

2. Revision of the basic Department of Education approved IEP format (Appendix F) to include designated sections requiring:
   a. the citation of GCT scores and students' specific GCT weaknesses in the IEP statement of Present Level(s) of Educational Performance;
   b. the citation of the specific GCT skills to be taught to the student in the IEP annual goal statements;
   c. the citation of the specific GCT skills to be taught to the student in the IEP short-term objectives statements;
   d. specific identification of the instructional personnel responsible for teaching or coordinating the instruction of the GCT skills cited in the annual goals and short-term objectives statements;

3. Development of an inservice program for local school division special education administrators to clarify state policies and procedures regarding the relationship between the GCT and the IEP;
4. Inclusion in the Administrative Review procedure of a random examination of local division IEPs which specifically evaluates the GCT-IEP relationship.

It is further recommended that the Department of Education of the Commonwealth of Virginia utilize its personnel and resources to determine to what extent a direct relationship between the IEP and the skills assessed by the GCT may effect the performance of handicapped students on the GCT.
As a result of the creation of the Department of Education, the regulations under Part B of the Education of the Handicapped Act (EHA-B; 20 U.S.C. 1411-1420), were recently transferred to title 34 (education) of the Code of Federal Regulations (CFR) (45 FR 77368, November 21, 1980). The EHA-B regulations were transferred and redesignated as 34 CFR Part 300. Individual section numbers, however, have not changed. For example, the sections on IEPs previously 45 CFR 121a. 340-121a. 349 have been redesignated as 34 CFR 300. 340 - 300. 349 (46 FR 5460, January 19, 1981).
TO: Division Superintendents

FROM: W. E. Campbell, Superintendent of Public Instruction
R. L. Boyer, Assistant Superintendent for Program Development

SUBJECT: Administration of the Graduation Competency Testing Program

The first administration of the Virginia Graduation Competency Tests, to tenth-grade students, is scheduled for October 16-20, 1978. The tests, in reading and mathematics, are being administered to determine students' instructional needs related to the graduation competencies.

By October 2 you should receive the following test materials for the Graduation Competency Testing Program in the quantities indicated on the enclosed receipt form:

- Commonwealth of Virginia Reading Test, Form 1; a special edition of the 10 Basic Skills Test, Secondary Level 2.
- 10X Teacher's Guides (shipped from the Instructional Objectives Exchange, Los Angeles, California)
- Commonwealth of Virginia Graduation Competency Test-Mathematics (shipped from Scholastic Testing Service, Berwyn, Illinois)
- Virginia Graduation Competency Testing Program Answer Sheets (shipped from Jack L. Hartman & Co., Inc., Henndale, Indiana)

If you do not receive the reading and mathematics test books by October 2, telephone Frank G. Court, Assistant Supervisor of Testing at (304) 765-1280. If you do not receive the answer sheets by October 2, telephone Jack L. Hartman at (703) 362-1691.

The number of reading test booklets and mathematics test booklets which you will receive is equal to approximately 55 percent of your projected tenth-grade membership figure which you supplied on the Survey Test Material Needs form. The number of answer sheets, on which both reading and mathematics answers will be recorded, is equal to approximately 100 percent of projected tenth-grade membership. If these quantities are inadequate to meet your needs or...
if the quantities received are less than the quantities ordered, follow the directions in the General Instructions for Division Directors of Testing.

Both the reading and mathematics tests must be given on the day you have chosen during the week of October 16-20. Because of the limited number of test booklets, half of the students must take the reading test first and half must take the mathematics test first. A make-up testing session for those students who are absent on the testing day may be scheduled on a designated day no later than October 24. When testing has been completed, the test booklets are to be shipped to the Testing Service, Virginia Department of Education, and the completed answer sheets to the scoring service.

During the time that the test materials are in your possession, it is essential that rigid security of these materials be maintained.

A copy of the General Instructions for Division Directors of Testing for the administration of the Graduation Competency Testing Program is enclosed. A package containing sets of Instructions for School Testing Coordinators and Instructions for Test Administrators will be sent to division directors of testing by September 25. Questions regarding this matter should be directed to Claude A. Sandy or Frank J. Courts at (804) 786-1280.

WEC:RLB:11h

Enclosures

cc: Division Directors of Testing
VIRGINIA GRADUATION COMPETENCY TESTING PROGRAM (GCTP)

General Instruction for Division Directors of Testing
October 16-20, 1978

Schedule and Purpose

The Virginia Graduation Competency Tests in reading and mathematics are to be administered on the date during the week of October 16-20, 1978, which you have designated for your division. The purpose of the tests is to determine students' instructional needs related to the graduation competencies. No decisions have been reached regarding: (a) whether the program will be one-tiered or two-tiered (i.e., if students will be required to take an "exit" test or can be certified eligible to graduate based on their performance in the 9th or 10th grade); or (b) what will be a passing score.

Administration Directions

You will receive from the Testing Service, Virginia Department of Education, a package containing a supply of each of the following items:

1. Instructions for School Testing Coordinators
2. Instructions for Test Administrators
3. Sample answer sheets
4. GCTP School Testing Coordinator Receipt Forms
5. GCTP Test Administrator Receipt Forms

As soon as you receive the package, remove the contents and prepare a package of the materials for each school testing coordinator in your school division. Each package should contain the following:

1. One copy of the Instructions for School Testing Coordinators
2. One GCTP School Testing Coordinator Receipt Form
3. One sample answer sheet
4. One copy of the Instructions for Test Administrators for every 20 tenth-grade students in that particular school
5. Two copies of the GCTP Test Administrator Receipt Form for every 20 tenth-grade students

Distribute the packages of materials to the school testing coordinators as soon as possible. Keep a copy of the Instructions for School Testing Coordinators and Instructions for Test Administrators and study them carefully.

(over)
Test Materials

When you receive the test materials from the three suppliers, proceed as follows:

1. Open the IOX and STS cartons personally or have it done under your direct supervision. These cartons contain the reading and mathematics test booklets which are confidential.

2. Determine the number of reading test booklets, IOX Teachers's Guides, mathematics test booklets, answer sheets, and transmittal and identification forms.

3. Check these numbers against the number ordered for you (see the GCTP Test Materials Receipt Form enclosed with these instructions).

4. If you received fewer test booklets than were ordered, telephone Frank J. Courts immediately at (804) 786-1280. If you received fewer answer sheets than were ordered or fewer transmittal and identification forms than are needed, telephone Jack L. Hartman & Company immediately at (703) 362-1891. Note: If you received the numbers ordered but need more test booklets or answer sheets, telephone Frank J. Courts.

5. Complete the GCTP Test Materials Receipt Form and mail it to Frank J. Courts, Virginia Department of Education.

6. Prepare a package of materials for each school testing coordinator in your school division. Each package should contain
   a. Reading test booklets equal to approximately 55 percent of the tenth-grade membership in that school.
   b. Mathematics test booklets equal to approximately 55 percent of the tenth-grade membership in that school.
   c. Answer sheets equal to approximately 105 percent of the tenth-grade membership in that school.
   d. Approximately one IOX Teacher's Guide for every 35 reading test booklets. (Note: These may be distributed earlier if you wish.)
   e. One Building Identification Sheet.
   f. One Teacher/Group Identification Sheet for every 20 answer sheets.

7. Store the test materials in a secure and locked place in the central office until the day of testing. Note: The test materials may be distributed to the schools earlier, provided that a secure and locked place is available in each school.
8. Distribute the test materials to the schools and obtain a completed and signed GCTP School Testing Coordinator Receipt Form from each school testing coordinator.

9. At the end of the testing day, collect the test booklets, answer sheets—used and unused—with the completed identification sheets from the school testing coordinators, count them, sign the GCTP School Testing Coordinator Receipt Form and return it to the school testing coordinator.

   Note: The test materials may be left in the schools until after the make-up tests have been given, provided secure and locked places are available in the schools. A second alternative is to collect all test materials at the end of the testing day except enough copies for make-up testing, provided secure storage spaces are available.

Testing Special Students

   In general, all potential graduates of 1981 must be given an opportunity to take the tests; therefore, it is expected that all tenth-grade students and special students whose IEP indicates a program leading to a diploma will be tested in October. There has been insufficient time for the production of Braille and large-type editions of the graduation competency tests. Hence, students for whom such tests are required cannot be tested in October. Information about the availability of the special editions will be provided later.

   Guidelines for testing students with other handicapping conditions are enclosed. In general, testing conditions may be altered to accommodate these students, but the test items may not be reworded or otherwise changed. The difficulty of the test must not be altered as a result of the special accommodations. You and your school testing coordinators should determine suitable procedures for testing handicapped students.

   No special provisions have been made for students for whom English is a second language. They must take the regular tests under normal administrative procedures.

Length of the Testing Sessions

   Every student should be allowed sufficient time to complete the tests. Although a majority probably will finish the reading or mathematics test in 60 minutes and perhaps more than 90 percent will finish in 90 minutes, additional time should be allowed for those who need it. The outside time limit for completing a testing session will depend on the scheduling arrangements in your schools. The only constraint is that both testing sessions must be completed on the day you have selected during the week of October 16-20.

   It may be advisable to conduct a testing session in two stages. The session could be terminated for those who have finished at the end of 60, 70, 80 or 90 minutes; and the others could be allowed to continue for an additional period of time. You and your school testing coordinators should determine a testing schedule suitable for your schools.
Rationale for the Inclusion of Handicapped Students in the Testing for Minimum Competencies

A handicapping condition, by virtue of its presence and effect upon a student does not, of itself, preclude the possibility that a student can achieve the competencies required for graduation. Many students who are handicapped are capable of average or above average achievement and learning ability. Therefore, to exclude all handicapped students from the minimum competency requirements would discriminate against those handicapped students who would be entitled to a regular diploma at graduation.

Also, federal regulations under the Rehabilitation Act of 1973, Section 504, require that handicapped individuals be given equal opportunity to participate in and benefit from the customary policies and procedures granted to all individuals.

In addition, it should be remembered that there are many students who are disabled but not identified as handicapped that are in the public school system of Virginia. These students may require some of the special accommodations outlined in the material that follows. This would include students who were identified as handicapped earlier in their educational program but who are now full time participants in the regular educational system.

Relationship of the Individualized Education Program and Minimum Competencies

It is understood that during the course of a student's education there are to be preliminary evaluations to discern the extent of achievement a student is making toward meeting the requirements of minimum competencies for graduation. These evaluations should identify the student's progress in achieving the competencies and areas of weakness. The IEP developed for a handicapped student would accrue the weakness; the student demonstrates... these weaknesses, should be reflected in the long range goals as well as the short term objectives.

Accommodations in Minimum Competency Testing Situations for Various Handicapping Conditions

Introduction

The purpose of the following is to provide a framework of understanding concerning special considerations that should be made for handicapped children who will be taking the minimum competency test.

For example, a visually impaired student may be an expert reader, but not use a different method of reading (Braille) from the regular education student. Therefore, arrangements need to be made so that this student's true knowledge and abilities can be tested.

Decisions as to which accommodations are needed for a handicapped child in a particular category should be made with the recommendations of the student's special education teacher. (For example, not every visually impaired child will need all three accommodations shown below; some visually impaired students may need no special accommodations in order to be tested fairly, or a student with very poor muscle control may have difficulty marking within the space provided on a computerized answer sheet.

It is assumed, in setting forth the following considerations, that the goal of minimum competency testing is to ascertain the level of knowledge the child has in each area being tested.
Make-Up Testing

You may schedule a make-up session on a designated day no later than October 24 for those students who are absent on the testing day. All make-up tests must be given on the same day. You and your school testing coordinators should determine a suitable procedure for administering the make-up tests. Students scheduled for testing in October 1978 and not tested may be tested in April 1979. The same rigid security of the test materials must be maintained for make-up testing.

Note: Special marking of make-up answer sheets is necessary. Tell your school testing coordinators to be certain that the answer sheets of all students who take make-up tests are marked in the following manner:

In the lower left section of Side 1 of the answer sheet is a column headed "Test." In this column:

- Mark "1" if the reading test was a make-up.
- Mark "2" if the mathematics test was a make-up.
- Mark "3" if both tests were make-ups.

Returning Test Materials

After all testing has been completed, destroy the surplus answer sheets. Repackage the completed answer sheets in their original cartons, being sure that a completed Building Identification Sheet is on top of the answer sheets and Teacher/Group Identification Sheets for each school. Be sure that the completed transmittal form is on top of the answer sheets in Carton No. 1. Do not use rubber bands or paper clips to secure the answer sheets.

Separate the reading and mathematics test booklets and package them in their original cartons. All test booklets that you received must be accounted for.

Ship the completed answer sheets with their identification forms by priority mail or UPS to

MA Inc./Testing Division
P. O. Box 13052
Tucson, Arizona 85732
(Attn: Jack L. Hartman & Company)

Ship the test booklets by insured parcel post, return receipt requested, or J&D to

Mr. Frank J. Courts
Virginia Department of Education
P. O. Box 60 (1322 E. Grace Street)
Richmond, Virginia 23216

Testing Service
September 1978
Applicable to Handicapped Children in General

1. Provide opportunity for all special education students to become acquainted with the type of test to be given, through trial questions/answers.
2. Allow tests to be given by a person familiar to the child.
3. If needed, allow adjustment of time in which the test is to be completed.
4. Provide a quiet testing room, with carrels when necessary, for students who are easily distracted by background noise and/or movement.
5. Determine the place where the testing will take place (regular education or special education classroom, administrative office, student’s home) according to the individual student’s needs.
6. If the test requires students to respond orally, and a student has difficulty with oral expression (hearing impaired, speech/language impaired—motor impaired—cerebral palsey, learning disabled), make exceptions in the testing requirements for such items.
7. Provide ways for the student to demonstrate his/her competencies in a practical manner (e.g., instead of asking for the “radius of a circle,” ask the student to “measure from the center of the circle to the edge.”

Applicable to Particular Handicapping Conditions

Visually Impaired

1. Provide for test to be given/taken in Braille and/or provide test in large type
2. Secure necessary equipment (e.g., magnifying materials, electronic readers) from Virginia Commission for the Visually Handicapped.

Hearing Impaired

1. Seat student near front of room
2. Have person giving instructions face the student
3. Determine ahead of time that the student’s hearing aid is in optimal working condition
4. Provide interpreter if needed

Learning Disabled

1. Allow student to wear noise buffer over ears if needed

Speech

1. Student with speech problems at the secondary level should not present any concerns as far as testing for minimum competencies. The speech student who has other handicapping conditions should be treated as suggested under that category.

Emotionally Disturbed

1. Provide for the student to take the test alone or in a small group
2. Allow the student to take the test at the time of day and during a time in his/her treatment process when the student can handle the stress
3. Allow test to be taken in time increments appropriate to the student’s attention span
4. Provide noise-buffer for students to wear over ears, if needed

Orthopedically Impaired (cerebral palsy, amputation, polio, bone tuberculosis, etc.)

1. Provide an adapted typewriter or communication board, if needed
2. Allow oral response, if needed

Other Health Impaired (sickle cell anemia, asthma, epilepsy, tuberculosis, leukemia, etc.)

1. Provide for test to be given at home by the evaluator if child is home
2. Administer the test during a stable time in the student’s condition

* This is a copy of Appendix F of the “Suggestions for Implementing Virginia’s Minimum Competency Program,” published by the Department of Education in September 1978.
ADMINISTRATIVE

TO: Division Superintendents

FROM: W. E. Campbell, Superintendent of Public Instruction
       R. L. Boyer, Assistant Superintendent for Program Development

SUBJECT: Administration of the Graduation Competency Testing Program—April, 1979

The second administration of the Virginia Graduation Competency Tests is scheduled for the week of April 2-6, 1979. The second administration is for members of the class of 1982 and members of the class of 1981 who did not pass the tests last fall.

By March 16 you should receive the following test materials for the Graduation Competency Testing Program in the quantities indicated on the receipt form sent to your Division Director of Testing.

Commonwealth of Virginia Reading Test, Form 2—a special edition of the IOX Basic Skill Test, Secondary Level (shipped from Instructional Objectives Exchange, Los Angeles, CA).

Commonwealth of Virginia Graduation Competency Test—Mathematics, Form B (shipped from Scholastic Testing Service, Bensenville, IL).

Virginia Graduation Competency Testing Program answer sheets and identification sheets (shipped from Jack L. Hartman & Co., Roanoke, VA).

If you do not receive the reading and mathematics test booklets by March 16, telephone Frank J. Courts (Department of Education) at (804) 786-1280. If you do not receive the answer sheets by March 16, telephone Jack L. Hartman & Co. at (703) 362-1891.

The quantities of reading and mathematics test booklets which you will receive are equal to approximately 55% of your September 30, 1978, ninth-grade membership plus 55% of your tenth-graders who have not passed the reading and mathematics tests, respectively. The quantity of answer sheets should provide one for every student taking at least one of the tests, plus at least 60 extra. These quantities are based on the needs of an administration plan in which half of your students would be tested with math first and the other half with reading first. The General Instructions for Division Directors of Testing will provide directions to follow in case these quantities are inadequate for your needs.

(over)
Testing does not have to be confined to one day. Each school division should establish its own schedule during the week of April 2-6; however, limiting it to a two- or three-day period is advisable. The schedule should be designed so as to minimize the potential for "sharing" of information by students who have taken a test with those who have not.

A make-up testing session may be scheduled following the local testing dates, but no later than April 10. Answer sheets of students taking a test during the make-up testing session must be marked appropriately (see Instructions for School Testing Coordinators). Make-up test results may not be used to certify graduation eligibility, but can provide diagnostic information.

Rigid security of the test materials must be maintained. Final disposition of test materials must be in accordance with directions to be provided at a later date.

A copy of the General Instructions to Division Directors of Testing is enclosed. A package of materials containing Instructions for School Testing Coordinators, Instructions for Test Administrators, and other materials to be used in the program are being sent to Division Directors of Testing under separate cover. Questions regarding this matter should be referred to Frank J. Courts or Claude A. Sandy at (804) 786-1280.

WEC/RLB/aec

Enclosure

cc: Division Directors of Testing
VIRGINIA GRADUATION COMPETENCY TESTING PROGRAM (GCTP)
General Instructions for Division Directors of Testing
April 2-6, 1979

Schedule and Purpose

The Virginia Graduation Competency Tests in reading and mathematics are to be administered on a schedule which you establish for your division during the week of April 2-6. The purposes of the tests are to determine whether or not students have satisfactorily mastered the graduation competencies and to determine students’ instructional needs related to the graduation competencies. The passing score for all students will be a scaled score equivalent to 70% on the first forms of the tests.

Administration Directions

You will receive from the Testing Service, Virginia Department of Education, a package containing a supply of each of the following items:

1. Instructions for School Testing Coordinators
2. Instructions for Test Administrators
3. GCTP School Testing Coordinator Receipt Forms
4. GCTP Test Administrator Receipt Forms

As soon as you receive the package, remove the contents and prepare a package of materials for each school testing coordinator in your school division. Each package should contain the following:

1. One copy of the Instructions for School Testing Coordinators
2. One GCTP School Testing Coordinator Receipt Form
3. One copy of the Instructions for Test Administrators for every 20 students to be tested.
4. One copy of the GCTP Test Administrator Receipt Form for every 20 students to be tested.

Distribute the packages of materials to the school testing coordinators as soon as possible. Keep a copy of the Instructions for School Testing Coordinators and Instructions for Test Administrators and study them carefully.

Students to be Tested

Members of the class of 1982 and members of the class of 1981 who did not pass the tests last fall (including those who took the tests as make-ups) are eligible for
testing. While all potential graduates of 1981 and 1982 who have not passed the tests, including handicapped students, should be given an opportunity to take them, they may choose not to take the test if they feel the need for additional preparation or for other reasons. Guidance for such students in making this choice would be desirable.

Testing Handicapped Students

Handicapped students should be given an opportunity to take the tests. It is expected that handicapped students whose IEP indicates a program leading to a diploma would take the test and other handicapped students would be given the option of taking the tests or not taking the tests. Guidance for such students and/or their parents in making this decision would be desirable. Braille and large-type editions of the graduation competency tests will be available in the near future. Information about the availability of these special editions will be provided in a separate communication.

Guidelines for testing students with handicapping conditions are enclosed. In general, testing conditions may be altered to accommodate handicapped students, but the test items may not be reworded or otherwise changed. The difficulty of the test must not be altered as a result of the special accommodations. You and your school testing coordinators should determine suitable procedures within these guidelines.

No special provisions have been made for students for whom English is a second language. They must take the regular tests under normal administrative procedures. They may elect not to take the tests at this time, however, if they do not feel prepared to do so.

Special handicapped student codes, which must be indicated on the answer sheets, are contained in the Instructions for School Testing Coordinators. This section should not be marked for regular students.

Length of the Testing Sessions

Every student should be allowed sufficient time to complete the tests. The outside time limit for completing a testing session will depend on the scheduling arrangements in your schools. The only constraint is that both testing sessions must be completed during the period designated for testing.

It may be advisable to conduct a testing session in two stages; e.g., the first stage could be terminated for those who had finished at the end of 60 or 90 minutes. Students who had not finished at the end of the first stage would be allowed to continue. In planning your testing schedule, it might be helpful to know that in the fall 1978 administration the median time to complete each test was just under 60 minutes. More than 97% had finished the tests in 90 minutes and more than 99.5% had finished in 120 minutes.

Make-Up Testing

Make-up testing sessions may be scheduled on one or two days up to April 10 for those students who are absent during the regular testing period. You and your school testing coordinators should determine a suitable procedure for administering
the make-up tests. Make-up tests are to be administered for the purpose of determining instructional needs and not for certifying graduation eligibility. Students should understand this prior to taking a make-up test. The same rigid security of test materials must be maintained for make-up testing. (Note: Special marking of make-up answer sheets is necessary.) Tell your school testing coordinators to be certain that the answer sheets of all students who take make-up tests are marked in the following manner:

On Side 2 of the answer sheet just to the right of the name grid is a column headed "Make-up". This section should be marked as follows:

"R" if the reading test was a make-up.
"M" if the mathematics test was a make-up.
"B" if both tests were make-ups.

This section should not be marked if both tests were taken on the regular testing days.

Test Materials

When you receive the test materials from the three suppliers, proceed as follows:

1. Open the IOX and STS cartons personally or have it done under your direct supervision. These cartons contain the reading and mathematics test booklets, which are confidential. Some mathematics test booklets contain experimental items. Such booklets will contain more than 99 items; however, only the first 99 will constitute the test. The experimental booklets will be separated from the regular booklets and special instructions for them will be provided.

2. Determine the quantities of reading test booklets, mathematics test booklets, answer sheets, and transmittal and identification forms.

3. Check these quantities against the quantities ordered for you (see the GCTP Test Materials Receipt Form enclosed with these instructions).

4. If you received fewer test booklets than were ordered, telephone Frank J. Courts immediately at (804) 786-1280. If you received fewer answer sheets than were ordered or fewer transmittal and identification forms than are needed, telephone Jack L. Hartman & Company immediately at (703) 362-1891. If you received the quantities ordered but need more test booklets or answer sheets, telephone Frank J. Courts.

5. Complete the GCTP Test Materials Receipt Form and mail it to Frank J. Courts, Department of Education.

6. Prepare a package of materials for each school testing coordinator in your school division. If you follow the plan of testing half the students in each school with the reading test first and the other half with the mathematics test first, then each package should contain

a. Reading test booklets equal to approximately 55 percent of the number of students taking the reading test.

b. Mathematics test booklets equal to approximately 55 percent of the number of students taking the mathematics test.

(over)
c. Answer sheets equal to approximately 105 percent of the number of students to be tested.

d. One Building Identification Sheet

e. One Teacher/Group Identification Sheet for every 20 answer sheets.

(Note: Do not use any materials from the fall 1978 test administration.)

The school testing coordinator packages may have to be modified if a different testing schedule is being followed.

7. Store the test materials in a secure and locked place in the central office until the first day of testing. (Note: The test materials may be distributed to the schools earlier, provided that a secure and locked place is available in each school.)

8. Distribute the test materials to the schools and obtain a completed and signed GCTP School Testing Coordinator Receipt Form from each school testing coordinator.

9. At the end of the last testing day, collect the test booklets and answer sheets—used and unused—with the completed identification sheets from the school testing coordinators, count them, sign the GCTP School Testing Coordinator Receipt Form and return it to the school testing coordinator.

(Note: The test materials may be left in the schools until after the make-up tests have been given, provided secure and locked places are available in the schools. A second alternative is to collect all test materials at the end of the testing day except enough copies for make-up testing, provided secure storage spaces are available.)

Disposition of Test Materials

After all testing has been completed, collect and store the surplus answer sheets. After checking the completed answer sheets for completeness and accuracy, repackage them in their original cartons, being sure that a completed Building Identification Sheet is on top of the answer sheets and Teacher/Group Identification Sheets for each school. Be sure that the completed transmittal form is on top of the answer sheets in Carton No. 1. The stack of answer sheets may be bound with a paper band or placed in an envelope. Do not use rubber bands or paper clips. Ship the completed answer sheets with their identification forms by priority mail or UPS to

HWA Inc./Testing Division
Hebert Law Bldg.
Ninth Street
(P. O. Box 820)
Kinder, LA 70648
(Attn: Jack L. Hartman & Co.)

After all testing has been completed, all test booklets should be repackaged in their original cartons and stored in a secure place. It is anticipated that the tests will be made public at some time in the future, but security must be maintained until that time. Instructions regarding their disposition should be provided shortly after the April testing.

Testing Service
March 1979
MINIMUM COMPETENCIES AND HANDICAPPED STUDENTS*

Rationale for the Inclusion of Handicapped Students in the Testing for Minimum Competencies

A handicapping condition, by virtue of its presence and effect upon a student, does not, of itself, preclude the possibility that a student can achieve the competencies required for graduation. Many students who are handicapped are capable of average or above average achievement and learning ability. Therefore, to exclude all handicapped students from the minimum competency requirements would discriminate against those handicapped students who would be entitled to a regular diploma at graduation.

Also, federal regulations under the Rehabilitation Act of 1973, Section 504, require that handicapped individuals be given equal opportunity to participate in and benefit from the customary policies and procedures granted to all individuals.

In addition, it should be remembered that there are many students who are disabled but not identified as handicapped that are in the public school system of Virginia. These students may require some of the special accommodations outlined in the material that follows. This would include students who were identified as handicapped earlier in their educational program but who are now full-time participants in the regular educational system.

Relationship of the Individualized Education Program and Minimum Competencies

It is understood that during the course of a student's education there are to be preliminary evaluations to discern the extent of achievement a student is making toward meeting the requirements of minimum competencies for graduation. These evaluations should identify the student's progress in achieving the competencies and areas of weakness. The IEP developed for a handicapped student should address the weaknesses the student demonstrates and these weaknesses should be reflected in the long-range goals as well as the short-term objectives.

ACCOMMODATIONS IN MINIMUM COMPETENCY TESTING SITUATIONS FOR VARIOUS HANDICAPPING CONDITIONS

Introduction

The purpose of the following is to provide a framework of understanding concerning special considerations that should be made for handicapped children who will be taking the minimum competency test.

For example, a visually impaired student may be an expert reader but have a different method of reading (Braille) from the regular education student. Therefore, arrangements need to be made so that this student's true knowledge and abilities can be tested.

Decisions as to which accommodations are needed for a handicapped child in a particular category should be made with the recommendations of the student's special education teacher. (For example, not every visually impaired child will need both accommodations shown below; some visually impaired students may need no special accommodations in order to be tested fairly, or a student with very poor muscle control may have difficulty marking within the space provided on a computerized answer sheet.)

It is assumed, in setting forth the following considerations, that the goal of minimum competency testing is to ascertain the level of knowledge the child has in each area being tested.

(over)
Applicable to Handicapped Children in General

(1) Provide opportunity for all special education students to become acquainted with the type of test to be given, through trial questions/answers.
(2) Allow tests to be given by a person familiar to the child.
(3) If needed, allow adjustment of time in which the test is to be completed.
(4) Provide a quiet testing room, with carrels when necessary, for students who are easily distracted by background noise and/or movement.
(5) Determine the place where the testing will take place (regular education or special education classroom, administrative office, student's home) according to the individual student's needs.
(6) If the test requires students to respond orally, and a student has difficulty with oral expression (hearing impaired, speech/language impaired, motor impaired—cerebral paralyzed, learning disabled), make exceptions in the testing requirements for such items.

Applicable to Particular Handicapping Conditions

Visually Impaired

(1) Provide for test to be given/taken in Braille and/or provide test in large type.
(2) Secure necessary equipment (e.g., magnifying materials, electronic readers) from Virginia Commission for the Visually Handicapped.

Hearing Impaired

(1) Seat student near front of room.
(2) Have person giving instructions face the student.
(3) Determine ahead of time that the student's hearing aid is in optimal working condition.
(4) Provide interpreter if needed.

Learning Disabled

(1) Allow student to wear noise buffer over ears if needed.

Speech

(1) Student with speech problems at the secondary level should not present any concerns as far as testing for minimum competencies. The speech student who has other handicapping conditions should be treated as suggested under that category.

Emotionally Disturbed

(1) Provide for the student to take the test alone or in a small group.
(2) Allow the student to take the test at the time of day and during a time in his/her treatment process when the student can handle the stress.
(3) Allow test to be taken in time increments appropriate to the student's attention span.
(4) Provide noise-buffers for students to wear over ears, if needed.

Orthopedically Impaired (cerebral palsy, amputation, polio, bone tuberculosis, etc.)

(1) Provide an adapted typewriter or communication board, if needed.
(2) Allow oral response, if needed.

Other Health Impaired (sickle cell anemia, asthma, epilepsy, tuberculosis, leukemia, etc.)

(1) Provide for test to be given at home by the evaluator if child is homebound.
(2) Administer the test during a stable time in the student's condition.

*This is a revision of an appendix in "Suggestions for Implementing Virginia's Minimum Competency Program," published by the Department of Education in September, 1978.
September 1, 1982

Dr. S. John Davis
Superintendent of Public Instruction
Department of Education
P.O. Box 6Q
Richmond, VA 23216

Dear Dr. Davis:

I am a doctoral student in the School of Education at the College of William and Mary. My dissertation topic requires me to trace the development of minimum competency testing in Virginia, specifically, the development of the Basic Learning Skills (BLS) testing program for primary and elementary school students and the Graduation Competency Test (GCT) for high school students.

In the process of my review of the professional literature and Virginia documents I have traced the development of the BLS program to the 1976 recommendations of the Joint House-Senate Subcommittee to Review the Standards of Quality (H.J.R. 142, 1974) which led to the adoption of Standard I "Basic Learning Skills" and the uniform statewide assessment provision of Part B of Standard of "Test and Measurement" in the 1976-1978 Standards of Quality (SOQ) which, essentially, initiated the development of the BLS testing program for primary and elementary school students. However, I have been unable to locate any statement of the reason(s) for the Board of Education's (apparently related) 1976 action in revising the "Graduation Eligibility" section of the Standards of Accrediting Secondary Schools in Virginia which first introduced the competency-based requirement for graduation from accredited high schools in Virginia. This revision was made prior to any similar action in regard to the content of the SOQ and, in effect, resulted in revision of the SOQ for the 1978-1980 SOQ to include Standard 9C which linked the award of a high school diploma to student performance on uniform statewide tests of competency in reading and mathematics.

The gap with respect to the reason(s) for the Board's action in revising the "Graduation Eligibility" section of the Standards of Accrediting Secondary Schools in Virginia in 1976 is problematic and raises several questions which I can not, with the information presently available to me, answer on a formal factual basis. Specifically: "Why did the Board revise the 'Graduation Eligibility' section to include a competency-based requirement for high school graduation?"; "Was this action at the request of the General Assembly?"; "Was this action in anticipation of an extension by the
Generals Assembly of the basic skills focus to the high school level?"

"Was this action the result of political maneuvering between the Board and the General Assembly to assert control over the focus of public education in Virginia?"

I would appreciate any assistance which you might be able to provide in assisting me to determine the rationale for the Board's action in this matter.

Sincerely,

Pat Nealon

cc: Dr. Allix B. James, President
Virginia Board of Education
2956 Hathaway Rd.
Richmond, VA 23225
April 21, 1983

Mr. Patrick Nealon
School of Education
College of William and Mary
Williamsburg, VA 23185

Dear Mr. Nealon:

This is in response to your letter of February 3, 1983, requesting clarification of the Department's position regarding minimum competency testing program and the handicapped; more specifically, as it pertains to the Department's manual entitled, "Minimum Competencies and the Handicapped." I will take each of your questions as you posed them and attempt to answer them.

1. The above referenced manual serves as the primary guide for local school division personnel in coordinating and ensuring the rights of handicapped students with regard to the minimum competency testing program for the handicapped.

2. As a guidelines document approved by the Virginia Board of Education, it does contain policies with regard to the participation of handicapped students in the minimum competency testing program. Particularly, as it relates to a) the right of a handicapped student to be given the opportunity to participate in the minimum competency testing program and the responsibility of the local division to counsel and provide documentation in those cases where it is determined that the student may not have the necessary skills to successfully participate; b) the role of the IEP in scheduling the handicapped student to take the test and the listing of the accommodations therein to ensure non-discriminatory practice with regard to the competency test, and c) procedures to be followed in the oral administration test for certain eligible handicapped students.

At the same time, the manual does provide "suggestions" to be utilized at the discretion of the LEA personnel.
3. The Department of Education's position regarding the following is:

a) The function of the IEP is to serve as the primary tool and documentation in the scheduling of the handicapped student to take the test and a listing of the accommodations to be provided to the student in the testing situation.

b) The specific skills/objectives outlined in the minimum competency testing program are to serve as guideposts for teachers, parents and others in the development of the short-term objectives and annual goals for the student therein ensuring incremental progress toward achieving those skills outlined in the minimum competency testing program to the extent the student is able to achieve and develop those skills.

c) In those cases where a student has failed to achieve the criterion level of performance for any objective outlined in the minimum competency testing program, it is the position of the Department of Education that subsequent IEPs reflect in the goal statements and short-term objectives the instruction to be provided in order that a handicapped student may have a better opportunity to demonstrate achievement in those areas of weakness. Remediation in those areas in which the student demonstrated certain weaknesses may occur as part of the special education program or the remedial instruction provided in general education.

4. Based on the study that the Department of Education conducted during school year '82-83, certain revisions will be made during school year 1983-84 in the document to strengthen the Department's intent and position.

Two additional strategies have been employed to support the Department's position with regard to the policies and procedures outlined in the document. These activities are as follows:

1. An additional assurance was included in the 1983-84 updated six-year plans submitted by local school divisions wherein local superintendents were asked to sign-off on an assurance ensuring that the opportunity is provided to handicapped students to participate in the minimum competency program.
2. Local school division personnel were requested to outline their procedures that are followed by the local school division in implementing the minimum competency program for handicapped students.

I hope that this information sufficiently answers the questions you raised in your letter. If I can be of further assistance to you, please do not hesitate to contact me.

Sincerely,

Leslie W. Jones
Associate Director for
Special Education Programs

LWJ/pss

cc: James T. Micklem
Dr. S. John Davis  
Superintendent of Public Instruction  
Department of Education  
P.O. Box 6Q  
Richmond, VA 23216  

Dear Dr. Davis:

I am a doctoral student in special education administration and supervision at the College of William and Mary. My dissertation topic requires an analysis of Virginia's approach to the minimum competency testing of handicapped students.

As a result of my review of the Department of Education's manual, Minimum Competencies and the Handicapped-Guidelines (MCHC-G) several questions have arisen which I am unable to answer with respect to MCHC-G provisions regarding the participation of handicapped students in the GCT program:

1) Is the manual intended to serve as the primary guide for LEA personnel in coordinating the participation of handicapped students in the GCT program?

2) Does the manual outline Department of Education policies with regard to the coordination of special education programs with the participation of handicapped students in the GCT programs or does the content of the manual provide only "suggestions" to be utilized at the discretion of LEA personnel?

3) What is the policy of the Department of Education regarding the following topics:
   a) the function of the IEP in the GCT program?
   b) the relationship between the skills assessed by the GCT program and the annual goals and short-term objectives of the IEP's of individual handicapped students?
   c) the planning and provision of remedial instruction for handicapped students who fail one or both sections of the GCT?

4) Is the Department of Education planning any revision of the manual regarding topics 3 a, b, and c?
I would greatly appreciate any assistance which you or your staff may provide in clarifying the Department of Education's position on these questions.

Sincerely,

Pat Nealon
This is in response to your letter of February 3, 1983, requesting clarification of the Department's position regarding minimum competency testing program and the handicapped; more specifically, as it pertains to the Department's manual entitled, "Minimum Competencies and the Handicapped." I will take each of your questions as you posed them and attempt to answer them.

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At the same time, the manual does provide "suggestions" to be utilized at the discretion of the LEA personnel.
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c) In those cases where a student has failed to achieve the criterion level of performance for any objective outlined in the minimum competency testing program, it is the position of the Department of Education that subsequent IEPs reflect in the goal statements and short-term objectives the instruction to be provided in order that a handicapped student may have a better opportunity to demonstrate achievement in those areas of weakness. Remediation in those areas in which the student demonstrated certain weaknesses may occur as part of the special education program or the remedial instruction provided in general education.

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Two additional strategies have been employed to support the Department's position with regard to the policies and procedures outlined in the document. These activities are as follows:

1. An additional assurance was included in the 1983-84 updated six-year plans submitted by local school divisions wherein local superintendents were asked to sign-off on an assurance ensuring that the opportunity is provided to handicapped students to participate in the minimum competency program.
2. Local school division personnel were requested to outline their procedures that are followed by the local school division in implementing the minimum competency program for handicapped students.

I hope that this information sufficiently answers the questions you raised in your letter. If I can be of further assistance to you, please do not hesitate to contact me.

Sincerely,

Leslie W. Jones
Associate Director for
Special Education Programs

LWJ/pss

cc: James T. Micklem
MINIMUM COMPETENCIES

AND

THE HANDICAPPED

Division of Special and Compensatory Education
Department of Education
Commonwealth of Virginia
Richmond, Va. 23216
October 1980
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INTRODUCTION

Purpose of Guidelines

The purpose of these guidelines is to assist Virginia's Local Education Agency (LEA) personnel, particularly teachers, administrators, counselors, and test providers, in the implementation of the minimum competency program for handicapped students. This manual suggests procedures and special accommodations to be used in the preparation, testing, remediation, and retesting of handicapped students.

Historical Perspective

The Virginia General Assembly, during the 1978 legislative session, mandated a competency requirement for students graduating from high school after January 1, 1981. As set forth in the Standards of Quality and Objectives for Public Schools in Virginia, 1978-80, Section 9C, the mandate is as follows:

*It is the policy of the Commonwealth that the awarding of a high school diploma shall be based upon achievement. In order to receive a high school diploma from an accredited secondary school after January 1, 1981, students shall earn the number of units of credit prescribed by the Board of Education and attain minimum competencies prescribed by the Board of Education. Attainment of such competencies shall be demonstrated by means of a test prescribed by the Board of Education.*

It must be noted, however, that the minimum competencies requirement for graduation originated with the inclusion of certain minimal requirements in the Graduation Eligibility section (p. 8) of the 1976 Standards for Accrediting Secondary Schools in Virginia. The requirements were to be determined on a local basis. Also, prior to and during the 18 months following the publication of these 1976 Standards of Accrediting Secondary Schools in Virginia, considerable interest was expressed by members of the House Education Committee in the concept of minimum competencies for graduation. This interest culminated in the inclusion of statewide minimum competencies in the 1978-80 Standards of Quality.

Several key words are to be noted in the legislative mandate: "The students shall attain minimum competencies and such competencies shall be demonstrated by means of a test prescribed by the Board of Education." (Emphasis ours.) The Board selected reading and computational skills as those which would be tested statewide for minimum competency.
Following this action of the board, an advisory committee for selection of tests to assess skills in these two areas was appointed by the Superintendent of Public Instruction. One of the first actions of this committee was to identify a set of reading and computational competencies as criteria in the test selection. The committee, meeting over a period of several months, studied information from several sources: The Southwest Consortium (composed of the school divisions of the cities of Danville and Lynchburg and the counties of Campbell, Franklin, Washington and Wise), individual localities, and the Virginia Department of Education.

The reading competencies identified by the committee are comparable to, though not identical with, those identified by these sources. The computational competencies, with the exception of a few minor revisions, are the same as those of the Department of Education sample competencies. Using the minimum competencies so identified, in conjunction with committee-developed operational criteria, two tests were selected to be used with the classes of 1981 and 1982.

Another action of the Board was the approval in 1978 of a revision of the Graduation Eligibility section of the Standards for Accrediting Secondary Schools in Virginia. This revision is compatible with the 1978-80 Standards of Quality mandate, Section 9C, mentioned on page 1, above.

Change in Graduation Requirements

The revised Graduation Eligibility section of the Standards for Accrediting Schools in Virginia (1978) retained the provision for local determination in two areas. It reads:

In addition to the units of credit specified in these standards, an accredited school shall require as a condition of graduation that students demonstrate mastery of minimum competency in the areas of reading and mathematics on tests prescribed by the Board of Education. Local authorities shall also require evidence, through performance related assessment tasks as part of the instructional program and/or through a test if preferred by the locality, that graduates have attained minimum competencies in the following:

1. Essential citizenship skills, concepts, and knowledge of history and government necessary for responsible participation in American society within the world community.

2. The knowledge and skills to qualify for further education or employment. (Page 18)
These standards placed upon the local school division the responsibility for identifying and assessing competencies in the areas of citizenship and preparation for further education and/or employment. No deadline was set for the initial assessment of these latter competency areas; however, it is necessary to have evidence of successful completion of those two areas by the spring of 1981. It is doubtful that many students are able to acquire all of these competencies prior to the 11th grade; therefore, it may be appropriate to plan for assessment in these two areas at the 11th or 12th grade level.

Reason for Inclusion of Handicapped in Minimum Competency Programs

Federal regulations under the Rehabilitation Act of 1973, Section 504, require that handicapped individuals be given equal opportunity to participate in and benefit from the policies and procedures customarily granted to all individuals.

A handicapping condition, by virtue of its presence and effect upon a student, does not, of itself, preclude the possibility that a student can achieve the competencies required for graduation. Many students who are handicapped are capable of achieving those skills considered minimal in the competency program. To exclude all handicapped students from the minimum competency requirements would discriminate against those handicapped students who would be entitled to a diploma at graduation.

Therefore, handicapped students must be given the option of participating in the Minimum Competency Testing (MCT) program. In the event that a handicapped student does not take the competency tests, the school division must document that the ramifications of not taking the test (see p. 6) have been explained to the parent(s) and the student, and that a waiver has been signed by the parent(s), and student when appropriate, requesting that the student not participate in the testing program (see Section II for further explanation and procedures).
Pedagogical Implications

“The major use of tests should be to improve education—to diagnose learning difficulties and to plan learning activities in response to learning needs. Tests must not be used in any way to label and classify students, to track into homogeneous groups...to perpetuate an elitism, or to maintain some groups or individuals 'in their place' near the bottom of the socioeconomic ladder.” (NEA, 1978)

Because every handicapped student is to be given the option of participating in the minimum competency program, it is important that those responsible for special education programs examine their school division's curricula, methodology, and classroom practice. Their objectives must be appropriate to the potential of the individual handicapped students, yet give the students the best possible chance of passing the MCT. A handicapped student's growth and development, present capabilities, talents, and potential must all be considered, along with the mandated standards.

Instruction should be planned to ensure that information and skills related to minimum competencies are included as an integral part of the special education instructional program. If the objectives are not included in the current program to which handicapped students have access, a revision of the curriculum should be undertaken in order to improve the student's educational opportunities.

Teachers should be requested to identify content and teaching strategies which relate to the competency program. They should also develop classroom management and recordkeeping systems which will document progress toward the attainment of the required competencies.

Data obtained from the MCT by special education teachers should be used in their planning of individual or small-group work with their students. Similarly, regular education teachers should use the data available from the test results to identify the regular education students who need extra help in learning certain skills.

However, it is far better not to wait for students to fail the MCT before initiating remedial help for them. Liles (1979) suggests that schools test their younger students with a pair of assessment instruments, one in reading and one in computation, which will measure student accomplishment on the same objectives that are measured by the statewide testing. Students who need extra help but who have not been identified earlier would then have more time to gain the skills they need in order to pass the MCT.
Also useful in identifying early those students needing extra help is the Basic Learning Skills Program, a description of which follows:

**Basic Learning Skills (BLS) Program**

It is essential to recognize the importance of the relationship of the Basic Learning Skills (BLS) Program* to the Minimum Competency Tests. The BLS Program is designed for grades K-6, while the Minimum Competency Tests are given beginning in grade 10. The BLS Program should provide the point of entry for preparing students for the Minimum Competency Tests. The BLS Program should be viewed as a diagnostic procedure to be administered early and throughout the student's school career. It is important to note that THE PURPOSE OF THE BLS PROGRAM IS NOT TO DETERMINE PROMOTION.

**Individualized Education Program (IEP)**

Because the Individualized Education Program (IEP) mandated for all identified handicapped students is the management tool to ensure that they receive an appropriate education, it is imperative that the IEP specify when a student is eligible to take the Minimum Competency Tests. The IEP includes, but is not limited to the following:

1. A statement of the student's present level of educational performance;
2. Long-range goals and short-term objectives.

The IEP developed for a handicapped student should state the strengths and weaknesses that the student demonstrates. The area of difficulties the student experiences should be reflected in the long-range goals as well as the short-term objectives.

The goals and objectives in a student's IEP may be developed to emphasize the educational objectives of the Basic Learning Skills. This suggestion does not imply that IEPs should be developed using the prescribed BLS objectives, but that such objectives should be used as a framework for understanding the basic skills to be learned by all students.

The proper insertion points for teaching necessary skills need to be identified in the IEPs of the handicapped students.

*Enacted by the 1976 General Assembly and prescribed in the 1976-78 Standards of Quality for Public Schools in Virginia, Standard I, Section B.
Section II

PRE-TEST ACTIVITIES

Scheduling the Handicapped Student for Testing

Board of Education policy has stipulated that all students are to take the Minimum Competency Tests at the 10th grade level. For some handicapped students, a more feasible timing would be for them to be tested when they have approximately two years of high school education left to complete.

In making this decision, the student's teacher plays an important role. It is assumed that the teacher(s) of these handicapped students can estimate fairly each student's progress in achieving the various competencies and will impart this estimate to the IEP committee. If a student has not achieved a reasonable number of the competencies and, therefore, has little or no chance of passing the tests, he/she should not be scheduled to take the competency tests at that time.

If there is a possibility that the student may never be ready, the parents and the student should be counseled that it is the right of the student to take the tests but that it may be more appropriate for the student not to take them. Also, the parents and the student must understand that such an exemption would make the student ineligible for a regular diploma, though it does allow the student the right to receive a certificate in recognition of his/her achievement and to participate in graduation exercises.

As noted on page 3, it is the responsibility of the school division to document that the above information has been given to the parent(s) and the student. A written request to exempt the student from Minimum Competency Testing should be signed by the parent(s), and student when appropriate, and kept on file by the school division.

Preparing the Student

Handicapped students must be adequately prepared to take the Minimum Competency Tests. The period of preparation is long-term: from kindergarten to the actual testing of the student's competencies. In Section I, the Basic Learning Skills program was discussed as it relates to the established minimum competencies. Also explicated was the need for the BLS objectives, and ultimately the minimum competencies, to serve as guides in the development of the student's Individualized Education Program (IEP) in the areas of math and reading. As the student moves into the year during which he/she will be taking the MCT, the following activities and considerations should be carried out:

1. Discuss with the student and the parent(s) the competency tests that will be taken and counsel them on the importance of these tests;
2. Give the student an idea of what kind of skills he/she is expected to have mastered;

3. Give the student abundant practice in demonstrating the skills by providing examples of the kinds of questions that will be in the competency tests.

Teachers are urged to set up a simulated test situation to assist the student in gaining confidence in the test-taking process. This simulated activity allows students to ask questions and express concerns about test-taking skills, thereby reducing their test anxiety.

Role of the Administrator of Special Education

The Coordinator or Supervisor of Special Education is responsible for coordinating the activities in preparation for the actual Minimum Competency Testing of those handicapped students whose IEPs indicate they are to take the tests. The purposes are as follows:

1. To ensure that all parents/guardians and students have been fully informed of their rights and responsibilities;

2. To determine actual numbers of handicapped students who will or will not be taking the test; and

3. To assure the provision of the various accommodations required for different handicapped students.

In addition, the Coordinator or Supervisor of Special Education should make every effort to become familiar with the General Instructions for Division Directors of Testing for the Administration of the Graduation Competency Testing Program (Superintendents' Memo No. 22, March 5, 1979).

Function of the IEP in the Competency Program

Decisions as to the scheduling of a handicapped student to take the competency tests and the selection of accommodations should be made during the IEP review session which precedes the spring Minimum Competency Testing program conducted by the State. This should be done early enough to permit adequate preparation of the student.

It is strongly recommended that this particular review session include not only the parent(s), the representative of the local school division, the student, and the student's special education teacher, but also the guidance counselor. The guidance counselor will have a record of the units of credit the handicapped student has earned. Working closely with the teacher(s), guidance personnel can assist greatly in appropriately scheduling the student to take the competency test.
Role of the Person Administering the Test

The person administering the test must make a genuine effort to create an environment which will lessen test anxiety for the students. The examiner should be knowledgeable about the specific accommodation(s) for each handicapped student being tested and make sure these are in place prior to the testing. Also, this person should be thoroughly familiar with the procedures for administering the test and test instructions.

Selection of Special Accommodations

The inclusion of the scheduled Minimum Competency Tests in the student's program can be reflected as a long-range goal written as follows:

The student will take the State Minimum Competency Tests as scheduled for (month) of (year). The following accommodations will be observed: (list accommodations)

Accommodations shown in Table I should be considered to ensure optimum conditions for taking the tests. None or any number of the accommodations may be appropriate; this should be determined on an individual basis and listed in the IEP for the year the student is scheduled to take the competency tests.

The various accommodations are listed in the left column on the table and the handicapping conditions are shown across the top. Specific recommendations of accommodations for various handicapping conditions are indicated by "X". THE PURPOSE OF THE MODIFICATIONS IS TO ENSURE, IN SO FAR AS POSSIBLE, THAT EACH HANDICAPPED CHILD RECEIVES MAXIMUM INDIVIDUAL CONSIDERATION OF HIS OR HER HANDICAP WITHOUT CHANGING THE NATURE OR INTEGRITY OF THE TEST.

The modifications for each handicapping condition have been judged as probably applicable to a majority of the students manifesting a particular condition. It is recommended that these modifications be deleted only if they are not applicable to a particular child.

Similarly, it is recommended that the full list of accommodations be examined in relation to each individual child. While many of the modifications are not applicable to a condition in general, some individual children may require them. For example, a modification allowing the child to mark answers in the answer book is specifically recommended for EMR or OI students. However, some EMR or OI students may require a more extreme modification such as having the answers recorded by a proctor. When making decisions about which accommodations will be observed, all aspects of a child's handicap(s) should be taken into account.
Table 1

MINIMUM COMPETENCY TEST ACCOMMODATIONS FOR HANDICAPPED STUDENTS

<table>
<thead>
<tr>
<th>Accommodations</th>
<th>EHRI</th>
<th>THR</th>
<th>HI</th>
<th>LD</th>
<th>SI</th>
<th>ED</th>
<th>OI</th>
<th>OHI</th>
<th>MHI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Scheduling Modifications:</strong> Tests will be administered:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. at time of day most beneficial to student.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. in periods of ___ minutes followed by rest breaks of ___ minutes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3. until, in administrator's judgment, student can no long sustain the activity due to physical disability or limited attention span.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>B. Setting Modifications:</strong> Tests will be administered:</td>
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</tr>
<tr>
<td>1. in a small group.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. in a carrel.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. in the special education classroom.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. at child's home.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. with child seated in front of classroom.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6. with teacher facing child.</td>
<td>X</td>
<td></td>
<td>X</td>
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<td>8. using an interpreter during the time oral instruction is given to the student(s).</td>
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<td>5. using templates and/or graph paper.</td>
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MINIMUM COMPETENCY TEST ACCOMMODATIONS FOR HANDICAPPED STUDENTS

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<td>2. Child's answers will be recorded by proctor or</td>
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<td>OR</td>
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<td>3. Child will mark answers by machine.</td>
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<td>1. Math test only will be read to child by proctor</td>
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<td>or via audio cassette.</td>
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<td>2. Reading test will be administered orally to</td>
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<td>students with severe psychomotor impairments,</td>
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<td>visual impairments, or learning disabilities which</td>
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<td>prevent them from reading the tests.*</td>
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NOTE: Any of the modifications listed above, except the modality modification for the reading test (E-2) can be considered and added for an individual child. Accommodations should take into account such things as secondary handicapping conditions.

*Accommodation E-2 is allowed under certain conditions and with approval of The Department of Education. (Refer to page 11 for conditions and procedures.)

SYMBOLS:

- EMR - Educable Mentally Retarded
- TMR - Trainable Mentally Retarded
- V.I. - Visually Impaired
- H.I. - Hearing Impaired
- L.D. - Learning Disabled
- S.I. - Speech Impaired
- E.D. - Emotionally Disturbed
- O.I. - Orthopedically Impaired
- O.H.I. - Other Health Impaired
- M.H. - Multiple Handicapped
Administering the reading test orally

Under certain conditions the reading test may be administered orally, including the use of audio cassettes, to student who cannot read the tests because of problems in visual modality. The following conditions must be met:

1. The decision to administer the tests orally should be preceded by counseling with the students and parents.

2. The student must first have attempted to pass the regular printed test or the large print braille editions.

3. A copy of the student's IEP must be submitted to the Department of Education by the local school division. The IEP will be reviewed and the request for oral administration will be approved or denied.

4. The student's permanent record and any other school documents which contain the competency test scores must clearly state that the reading test was a measure of the student's ability to process information read to him/her and not a measure of ability to decode printed symbols.

This policy was adopted by the Board of Education on May 22, 1980.
Section III
POST-TEST ACTIVITIES

Remediation

The Minimum Competency Tests must not merely identify those students whose skills indicate that they cannot qualify for a high school diploma; they must also provide guidance for persons responsible for trying to improve those skills.

The tests are constructed in such a way that a performance skill profile of each individual student is generated. Upon receiving these skill profiles, LEAs are to make them available to teachers as quickly as possible. These will provide a basis for planning remediation for students who have not passed the test. Instruction to improve the deficient areas should become part of the short-term objectives on the student's IEP.

It is vital that this remediation be initiated as soon as possible after the minimum competency scores are made available to the school division, as one cannot assume that any student, including a handicapped one, will be able to master a skill quickly, just because the need has been identified.

Counseling

Principals, guidance counselors, regular education and special education teachers, and parents all need to be able to counsel effectively their students who do not pass the Minimum Competency Tests.

One of the most profound problems concerns those high school students who are working diligently to gain enough units of credit for graduation, but who, upon first taking the Minimum Competency Tests, realize that no amount of remediation within the time remaining for them in high school will bring their reading and/or math skills to a passing level. If they can see no possibility of attaining a high school diploma, they may see no reason for giving heroic efforts to earning additional units of credit.

All significant adults in the life of such a student must be able to give positive reasons why this student should stay in school; or they should inform the student of alternatives, such as the GED or adult education programs; or they should give realistic hope that the student will be able to pass the tests upon being retested.

Parents should be regularly and intimately involved in the counseling, planning, and decision-making of their student.

Parents' positive attitudes and understanding can be very important in reducing the student's trauma as he/she plans realistically for the future.
Retesting

When a handicapped student has failed one or more of the minimum competency tests, every effort must be made to determine if this was a result of the handicap rather than the student's lack of knowledge in the area(s) being tested (i.e., reading and/or math).

Frequently, the student will know better than anyone else the reason for the poor test performance. Adverse testing conditions may have been responsible (e.g., testing done in a large group; or administered by someone not familiar with the coloring effect of a student's particular handicapping condition; or inability of the student to move from the test booklet to the answer sheet with accuracy; or inflexible time allotment for the test; or tests given consecutively, without allowance of adequate time intervals). If so, such adverse conditions need to be remedied and different accommodations need to be made available before the student is retested; however, changes must be within the parameters of the accommodations permitted for the handicapped. As stated earlier, permission to retest a student and conditions under which the test is to be given should be stipulated in the student's IEP.

Determination as to whether a student is to retake the tests is to be made at the IEP meeting following the testing which the student has failed. It is important that the following persons be involved in this decision:

- principal or guidance counselor
- special education teacher
- regular education teacher(s)
- parent(s)/guardian
- student
- others as appropriate

Caution must be exercised in the handling of such a meeting, as adolescents who have encountered failure are apt to have built a defensive facade which some persons could interpret as insolence, lack of motivation or concern, or surliness. The principal or counselor must be skilled in conducting such a meeting so that the best interests of the student are protected.
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Minimum Competency Tests Are Here! Richmond, VA: August 1978.

Division of Elementary Education. Reading: Activities That Work--Supplemental Skill Development Program. Richmond, VA: n.d.


OTHER SOURCES


Hubbard, P. Quoted in "How Much Must a Student Master?" Time, February 28, 1977.


Olsen, Kenneth L. and Linde, James L. Handicapped Students in Minimum Competency Testing Programs. No. 1 in a Series: An Analysis of the State of Art of Service Delivery and Technical Assistance Activities Provided to SEAs and LEAs Under PL 94-142. Lexington, KY: Mid-South Regional Resource Center (University of Kentucky), 1979.

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DATA FOR LD STUDENTS
PASS/FALL CCL
March 1981

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HS - Division High Schools GCT-ED
ED - Division ED-GCT
R/M - ED Taking Reading and Math/GCT
+R/+M - ED Passing Reading and Math/GCT
-R/-M - ED Failing Reading and Math/GCT
-R/+M - ED Failing Reading and Passing Math/GCT
+R/-M - ED Passing Reading and Failing Math/GCT
R/O+ - ED Taking and Passing Only Reading/GCT
R/O- - ED Taking and Failing Only Reading/GCT
M/O+ - ED Taking and Passing Only Math/GCT
M/O- - ED Taking and Failing Only Math/GCT

N(Total Division High Schools GCT-ED, March, 1981) = 34
N(Total Division High Schools GCT-ED, March, 1981) = 46
N(Total ED Participating in March, 1981 GCT) = 119
N(ED Taking Reading and Math Sections of March, 1981 GCT) = 98
\[
\begin{align*}
N(\text{ED Passing Reading and Math Section of March, 1981 GCT}) &= 0 \\
N(\text{ED Failing Reading and Math Sections of March, 1981 GCT}) &= 56 \\
N(\text{ED Failing Reading and Passing Math Sections of March, 1981 GCT}) &= 25 \\
N(\text{ED Passing Reading and Failing Math Sections of March, 1981 GCT}) &= 17 \\
N(\text{ED Taking March, 1981 Reading GCT Only and Passing}) &= 0 \\
N(\text{ED Taking March, 1981 Reading GCT Only and Failing}) &= 13 \\
N(\text{ED Taking March, 1981 Math GCT Only and Passing}) &= 0 \\
N(\text{ED Taking March, 1981 Math GCT Only and Failing}) &= 8
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\[
\frac{79}{93} = (84\%) \\
(106) (44\%) \\
(136) (55\%)
\]

\[
\]

\[
N(\text{Total 1980-1981, LD IEPs}) = 106 \left(\frac{106}{242} = 43\%\right)
\]

\[
N(\text{Total 1981-1982, LD IEPs}) = 136 \left(\frac{136}{242} = 55\%\right)
\]


93 Divisions Administering the March, 1981 GCT to LD = (84\%)
TABLE D

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*T.D.H.S. GCT-LD-R: Total Division High Schools GCT-LD (March, 1981) - Represented

**74 Divisions GCT-LD (March, 1981) - Represented = 79%**

***112 High Schools GCT-LD (March, 1981) - Represented = 74%***
TABLE E

Sex and Race by Grade Placement of LD Students Represented by 1980-1981 IEPs Satisfying Final Selection Criteria for Evaluation

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<td></td>
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</tr>
<tr>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>74 (79%)**</td>
<td>136</td>
<td>112/151 (74%)***</td>
<td>92 39 5</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*T.B.H.S. GCT-LD-R-Total Division High Schools GCT-LD (March, 1981)-Represented
T.B.H.S. GCT-LD-Total Division High Schools GCT-LD (March, 1981)

**74 Divisions GCT-LD (March, 1981)-Represented = 79%

***112 High Schools GCT-LD (March, 1981)-Represented = 74%
TABLE C

Sex and Race by Grade Placement of LD Students Represented by 1981-1982 IEPs Satisfying Final Selection Criteria for Evaluation

<table>
<thead>
<tr>
<th>Grade Placement</th>
<th>M/W</th>
<th>M/B</th>
<th>F/W</th>
<th>F/B</th>
<th>M/O</th>
<th>F/O</th>
<th>Total LD Students Represented</th>
</tr>
</thead>
<tbody>
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<td>10</td>
<td>55</td>
<td>21</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>0</td>
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<td>13</td>
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<td>4</td>
<td>0</td>
<td>1</td>
<td>39</td>
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<td>12</td>
<td>5</td>
<td>0</td>
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<td>77</td>
<td>34</td>
<td>15</td>
<td>7</td>
<td>2</td>
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<td>136</td>
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TABLE II


<table>
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<tbody>
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</tr>
<tr>
<td>2. Appomattox</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. Arlington</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. Bedford</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. Chesapeake</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6. Clifton Forge</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>7. Colonial Heights</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8. Fairfax</td>
<td>2</td>
<td>1</td>
</tr>
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<td>9. Giles</td>
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<td>10. Harrisonburg</td>
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<tr>
<td>11. Henrico</td>
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<td>1</td>
</tr>
<tr>
<td>13. Manassas Park</td>
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</tr>
<tr>
<td>14. New Kent</td>
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<td>16. Norfolk</td>
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<tr>
<td>17. Petersburg</td>
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<td>1</td>
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<tr>
<td>18. Prince William</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19. Pulaski</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20. Richmond City</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21. Roanoke City</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>22. Roanoke</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Smyth</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Southampton</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Divisions</td>
<td>18 (40%)</td>
<td>26 (59%)</td>
</tr>
</tbody>
</table>

\[ N(\text{Total ED IEPs}) = 18 \cdot \frac{18}{44} = 40\% \]

\[ N(\text{Total 1980-1981 ED IEPs}) = 18 \cdot \frac{18}{44} = 40\% \]

\[ N(\text{Total 1981-1982 ED IEPs}) = 26 \cdot \frac{26}{44} = 59\% \]
TABLE I

1980-1981 ED-IEPs Satisfying Final Selection Criteria for Evaluation—Count by School Division and Student Grade Placement

<table>
<thead>
<tr>
<th>Division</th>
<th>IEP(s)</th>
<th>T.D.H.S. GCT-ED-R*</th>
<th>IEP Student Grade Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T.D.H.S. GCT-ED</td>
<td>10</td>
</tr>
<tr>
<td>1. Appomattox</td>
<td>1</td>
<td>1/1</td>
<td>1</td>
</tr>
<tr>
<td>2. Arlington</td>
<td>3</td>
<td>2/3</td>
<td>2</td>
</tr>
<tr>
<td>3. Chesapeake</td>
<td>1</td>
<td>1/1</td>
<td>1</td>
</tr>
<tr>
<td>4. Clifton Forge</td>
<td>2</td>
<td>1/1</td>
<td>2</td>
</tr>
<tr>
<td>5. Colonial Heights</td>
<td>1</td>
<td>1/1</td>
<td>1</td>
</tr>
<tr>
<td>6. Fairfax</td>
<td>2</td>
<td>1/2</td>
<td>0</td>
</tr>
<tr>
<td>7. Giles</td>
<td>1</td>
<td>1/1</td>
<td>1</td>
</tr>
<tr>
<td>8. Henrico</td>
<td>1</td>
<td>1/1</td>
<td>1</td>
</tr>
<tr>
<td>9. Manassas City</td>
<td>1</td>
<td>1/1</td>
<td>0</td>
</tr>
<tr>
<td>10. Norfolk</td>
<td>1</td>
<td>1/3</td>
<td>1</td>
</tr>
<tr>
<td>11. Richmond City</td>
<td>1</td>
<td>1/3</td>
<td>1</td>
</tr>
<tr>
<td>12. Roanoke City</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
</tr>
<tr>
<td>13. Roanoke County</td>
<td>2</td>
<td>2/4</td>
<td>2</td>
</tr>
<tr>
<td>13 (38%)**</td>
<td>18</td>
<td>15/24 (62%)**</td>
<td>14</td>
</tr>
</tbody>
</table>

*T.D.H.S. GCT-ED-R-Total Division High Schools GCT-ED (March, 1981)—Represented
T.D.H.S. GCT-ED-R-Total Division High Schools GCT-ED (March, 1981)

**13 Divisions GCT-ED (March, 1981)—Represented = 38%
34 Total Divisions GCT-ED (March, 1981)

***15 High Schools GCT-ED (March, 1981)—Represented = 62%
24 Total High School GCT-ED (March, 1981)
<table>
<thead>
<tr>
<th>Grade Placement</th>
<th>M/W</th>
<th>M/B</th>
<th>F/W</th>
<th>F/B</th>
<th>M/O</th>
<th>F/O</th>
<th>Total ED Students Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>8</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>
TABLE K

1981-1982 ED-IEPs Satisfying Final Selection Criteria for Evaluation—Count by School Division and Student Grade Placement

<table>
<thead>
<tr>
<th>Division</th>
<th>IEP(s)</th>
<th>T.D.H.S. GCT-ED-R*</th>
<th>T.D.H.S. GCT-ED</th>
<th>10 11 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alexandria</td>
<td>1</td>
<td>1/1</td>
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<td>1 0 0</td>
</tr>
<tr>
<td>2. Arlington</td>
<td>3</td>
<td>3/4</td>
<td></td>
<td>2 1 0</td>
</tr>
<tr>
<td>3. Bedford</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>4. Chesapeake</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>5. Colonial Heights</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>6. Fairfax</td>
<td>1</td>
<td>1/2</td>
<td></td>
<td>0 0 1</td>
</tr>
<tr>
<td>7. Giles</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>8. Harrisonburg</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>0 1 0</td>
</tr>
<tr>
<td>9. Henrico</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>10. Manassas City</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>11. Manassas Park</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>0 1 0</td>
</tr>
<tr>
<td>12. New Kent</td>
<td>2</td>
<td>1/1</td>
<td></td>
<td>2 0 0</td>
</tr>
<tr>
<td>13. Newport News</td>
<td>1</td>
<td>1/2</td>
<td></td>
<td>0 1 0</td>
</tr>
<tr>
<td>14. Norfolk</td>
<td>2</td>
<td>2/3</td>
<td></td>
<td>2 0 0</td>
</tr>
<tr>
<td>15. Petersburg</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>16. Prince William</td>
<td>1</td>
<td>1/4</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>17. Pulaski</td>
<td>1</td>
<td>1/1</td>
<td></td>
<td>0 1 0</td>
</tr>
<tr>
<td>18. Roanoke City</td>
<td>1</td>
<td>1/2</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>19. Roanoke County</td>
<td>2</td>
<td>2/4</td>
<td></td>
<td>2 0 0</td>
</tr>
<tr>
<td>20. Southampton</td>
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<td>1/1</td>
<td></td>
<td>1 0 0</td>
</tr>
<tr>
<td>Division</td>
<td>IEP(s)</td>
<td>T.D.H.S. GCT-ED-R*</td>
<td>T.D.H.S. GCT-ED</td>
<td>Grade Placement</td>
</tr>
<tr>
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<td>--------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>21. Smyth</td>
<td>1</td>
<td>1/1</td>
<td>0</td>
<td>0 0 1</td>
</tr>
<tr>
<td>21 (61%)**</td>
<td>26</td>
<td>25/35 (71%)***</td>
<td>19</td>
<td>5 2</td>
</tr>
</tbody>
</table>

*T.D.H.S. GCT-ED-R-Total Division High Schools GCT-ED (March, 1981)-Represented
T.D.H.S. GCT-ED-R-Total Division High Schools GCT-ED (March, 1981)

**21 Divisions GCT-ED (March, 1981) Represented by IEPs = 61%
34 Total Divisions GCT-ED (March, 1981)

***25 Division High Schools GCT-ED (March, 1981) Represented by IEP = 71%
35 Total Division High Schools GCT-ED (March, 1981)
TABLE I

Sex and Race by Grade Placement of ED Students Represented by 1981-1982 IEPs Satisfying Final Selection Criteria for Evaluation

<table>
<thead>
<tr>
<th>Grade Placement</th>
<th>M/W</th>
<th>M/B</th>
<th>F/W</th>
<th>F/B</th>
<th>N/O</th>
<th>F/O</th>
<th>Total ED Students Represented</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>0</td>
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<td>11</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>26</td>
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</tbody>
</table>
### TABLE M

Virginia School Division's Administering CCT to LD High School Students in March, 1981*

<table>
<thead>
<tr>
<th>Counties</th>
<th>1. Accomack</th>
<th>22. Franklin</th>
<th>43. New Kent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Albemarle</td>
<td>23. Frederick</td>
<td>44. Northumberland</td>
</tr>
<tr>
<td></td>
<td>13. Buckingham</td>
<td>34. King and Queen</td>
<td>55. Rockingham</td>
</tr>
<tr>
<td></td>
<td>15. Caroline</td>
<td>36. Lee</td>
<td>57. Shenandoah</td>
</tr>
<tr>
<td></td>
<td>17. Chesterfield</td>
<td>38. Louisa</td>
<td>59. Southampton</td>
</tr>
<tr>
<td></td>
<td>19. Fairfax</td>
<td>40. Mathews</td>
<td>61. Tazwell</td>
</tr>
</tbody>
</table>
64. Westmoreland 85. Norfolk
65. Wise 86. Norton
66. Wythe 87. Petersburg
67. York 88. Radford

Cities and Towns

68. Alexandria 89. Richmond City
69. Buena Vista 90. Roanoke City
70. Charlottesville 91. Virginia Beach
71. Chesapeake 92. West Point
72. Clifton Forge 93. Williamsburg/James City
73. Covington
74. Danville
75. Falls Church
76. Frederick
77. Galax
78. Hampton
79. Harrisonburg
80. Hopewell
81. Lynchburg
82. Manassas City
83. Manassas Park
84. Newport News

*Data from Department of Education, Division of Research, Evaluation and Testing Computer Records of March, 1981 GCT Data for Handicapped Students.
### Table N

Virginia School Divisions Administering GCT to LD High School Students in March, 1981 Represented by Study LD-IEFs

<table>
<thead>
<tr>
<th>Counties</th>
<th></th>
<th></th>
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</thead>
<tbody>
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<td>1. Accomack</td>
<td>22. Giles</td>
<td>43. Prince Edward</td>
</tr>
<tr>
<td>2. Alleghany</td>
<td>23. Gloucester</td>
<td>44. Prince George</td>
</tr>
<tr>
<td>5. Arlington</td>
<td>26. Greene</td>
<td>47. Roanoke County</td>
</tr>
<tr>
<td>10. Botetourt</td>
<td>31. King and Queen</td>
<td>52. Southampton</td>
</tr>
<tr>
<td>13. Caroline</td>
<td>34. Loudoun</td>
<td>55. Washington</td>
</tr>
<tr>
<td>15. Chesterfield</td>
<td>36. Mecklenburg</td>
<td>57. Wise</td>
</tr>
<tr>
<td>18. Fauquier</td>
<td>39. Page</td>
<td>Cities and Towns</td>
</tr>
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<td>19. Floyd</td>
<td>40. Patrick</td>
<td>60. Alexandria</td>
</tr>
<tr>
<td>20. Franklin County</td>
<td>41. Pittsylvania</td>
<td>61. Buena Vista</td>
</tr>
<tr>
<td>21. Frederick</td>
<td>42. Powhatan</td>
<td>62. Charlottesville</td>
</tr>
</tbody>
</table>

Cities and Towns
63. Covington
64. Danville
65. Falls Church
66. Galax
67. Hampton
68. Harrisonburg
69. Lynchburg
70. Newport News
71. Norfolk
72. Petersburg
73. Richmond City
74. Roanoke City
75. Virginia Beach
76. Franklin City
77. Chesapeake
78. Manassas City
79. Manassas Park

*79 Divisions GCT-LD March, 1981 - Represented = 84.9%
93 Total Divisions GCT-LD March, 1981
<table>
<thead>
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<th>Division</th>
<th>Counties</th>
<th>Cities and Towns</th>
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<td></td>
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<td>1. Albemarle</td>
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<td></td>
<td></td>
<td>2. Amelia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Greensville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Madison</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Mathews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. New Kent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Shenandoah</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Tazwell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Clifton Forge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Hopewell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Norton</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Radford</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. West Point</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. Williamsburg/James City</td>
</tr>
</tbody>
</table>
## TABLE P

Virginia School Divisions Administering GCT to ED High School Students in March, 1981*

<table>
<thead>
<tr>
<th>Counties</th>
<th>Cities and Towns</th>
</tr>
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<tbody>
<tr>
<td>1. Albemarle</td>
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<tr>
<td>2. Appomattox</td>
<td>21. Clifton Forge</td>
</tr>
<tr>
<td>3. Arlington</td>
<td>22. Colonial Heights</td>
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<td>5. Carroll</td>
<td>24. Hampton</td>
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<td>6. Fairfax</td>
<td>25. Harrisonburg</td>
</tr>
<tr>
<td>7. Fauquier</td>
<td>26. Lynchburg</td>
</tr>
<tr>
<td>8. Floyd</td>
<td>27. Newport News</td>
</tr>
<tr>
<td>10. Greensville</td>
<td>29. Petersburg</td>
</tr>
<tr>
<td>11. Hanover</td>
<td>30. Richmond City</td>
</tr>
<tr>
<td>12. Henrico</td>
<td>31. Roanoke City</td>
</tr>
<tr>
<td>13. New Kent</td>
<td>32. Virginia Beach</td>
</tr>
<tr>
<td>14. Prince William</td>
<td>33. Chesapeake</td>
</tr>
<tr>
<td>15. Pulaski</td>
<td>34. Manassas City</td>
</tr>
<tr>
<td>16. Roanoke County</td>
<td>35. Manassas Park</td>
</tr>
<tr>
<td>17. Smyth</td>
<td></td>
</tr>
<tr>
<td>18. Southampton</td>
<td></td>
</tr>
<tr>
<td>19. Wise</td>
<td></td>
</tr>
</tbody>
</table>

*Data from Department of Education, Division of Research, Evaluation and Testing Computer Records of March, 1981 GCT Data for Handicapped Students.
<table>
<thead>
<tr>
<th>Counties</th>
<th>Cities and Towns</th>
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</thead>
<tbody>
<tr>
<td>1. Appomattox</td>
<td>13. Alexandria</td>
</tr>
<tr>
<td>3. Bedford</td>
<td>15. Clifton Forge</td>
</tr>
<tr>
<td>5. Giles</td>
<td>17. Harrisonburg</td>
</tr>
<tr>
<td>6. Henrico</td>
<td>18. Manassas City</td>
</tr>
<tr>
<td>10. Roanoke</td>
<td>22. Petersburg</td>
</tr>
<tr>
<td>11. Southampton</td>
<td>23. Richmond</td>
</tr>
</tbody>
</table>

24 Divisions GCT-ED March, 1981 - Represented  
34 Total Divisions GCT-ED, March, 1981  = 71%
TABLE R

Virginia School Divisions Administering GCT to ED High School Students in March, 1981 Not Represented by Study ED-TEPs

<table>
<thead>
<tr>
<th>Division</th>
<th>Counties</th>
<th>Cities and Towns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Albemarle</td>
<td>8. Danville</td>
</tr>
<tr>
<td></td>
<td>2. Carroll</td>
<td>9. Hampton</td>
</tr>
<tr>
<td></td>
<td>3. Fauquier</td>
<td>10. Lynchburg</td>
</tr>
<tr>
<td></td>
<td>4. Floyd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Greensville</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Hanover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Wise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Virginia Beach</td>
<td></td>
</tr>
</tbody>
</table>
INFORMATIONAL

TO: Division Superintendents
FROM: S. John Davis, Superintendent of Public Instruction
       Carl L. Rehm, Associate Superintendent for Curriculum and Instruction

SUBJECT: Minimum Competency Test-Handicapped Students-Impact Study

The Department of Education, Division of Special Education Programs and Pupil Personnel Services, is conducting an evaluation of the Minimum Competencies and the Handicapped guideline document issued by the Department of Education in October of 1980. This evaluation will examine the extent of distribution and use as well as the strengths and weaknesses of this document. In addition, the study will examine factors related to special education programming and the performance of handicapped students on Virginia's Graduation Competency Test.

The design of the field study will incorporate surveys of special education teachers, regular class teachers, principals, guidance counselors, and special education administrators and, as necessary, follow-up interviews related to specific points of reference.

Survey packets will be mailed to local Directors/Supervisors of Special Education and should be returned to Mr. Leslie W. Jones, Associate Director for Special Education Programs, by October 12, 1981.

The study design also requires a thorough examination of the IEPs of the study population. In accordance with the provisions of Sections 4.2.1 and 4.2.2, paragraphs 6, 8, and 9 of Management of the Student's Scholastic Record in the Public Schools of Virginia, we will be requesting that Directors/Supervisors of Special Education arrange to have copies of the IEPs of the students included in the study population mailed to this office. The IEPs to be mailed will be those for the school years 1980-1981 and 1981-1982. The confidentiality of this data will be maintained.

Some of the data gathered through this study will enable the Department to provide assistance to the General Assembly in its study of the impact of the Graduation Competency Test upon handicapped students (S.J.R. 150).
Should you have any questions regarding this study, please do not hesitate to contact Mr. Pat Nealon, Administrative Intern, or Mr. Leslie W. Jones, Associate Director, Department of Education, Division of Special Education Programs and Pupil Personnel Services, P. O. Box 6-Q, Richmond, Virginia 23216, Telephone: 804-225-2882.

Thank you for your assistance.

SJD/CLR: wwh
Dear:

This packet contains survey forms for the Department of Education's field study of Minimum Competencies and the Handicapped - Guidelines and the Impact of Virginia's Graduation Competency Test program upon special education students (SUPT S. MEMO NO. 128, September 25, 1981). Some of the data collected through this survey will enable the Department of Education to provide assistance to the General Assembly in its study of Virginia's Graduation Competency Test and handicapped students (S.J.R. 150).

In addition to the survey form for special education administrators there are envelopes containing survey forms for your secondary school special education teachers and their building principals, guidance counselors and regular class teachers who have provided instructional services to handicapped students.

An additional set of survey forms has been included for filing in your superintendent's office.

Please distribute the survey packets to the personnel in the indicated high schools as soon as possible. I would ask that you collect the envelopes containing the completed survey forms by November 13, 1981 and return them to this office in the envelope provided by November 16, 1981.

As indicated in SUPT S. MEMO NO. 128 of September 25, 1981, copies of the 1980-81 and 1981-82 IEPs of the students whose names are attached should be mailed to this office by November 20, 1981.
Should you have any questions regarding this study, please do not hesitate to contact me or Mr. Pat Nealon, Administrative Intern, at 804/225-2873.

Thank you for your assistance.

Sincerely,

Leslie W. Jones, Associate Director
Special Education Programs

LWJ:wwh

Enclosures

cc: msuperintendent
    Mr. James T. Nicklem
The MCT Scaled Scores printed above are special units of measurement which allow scores on different editions of the MCT Tests to be compared with one another. The Response Records at the bottom of each test box show how you answered the individual test questions (items). Correct responses are shown as "+". An incorrect response is indicated by the letter you marked: "A", "B", "C", or "D". An experimental item (one not used to determine passing) is shown by "*". A double-marked item is indicated by "**", and an item that you omitted by "O".

**Reading Test**

<table>
<thead>
<tr>
<th>Number of Questions</th>
<th>Number Correct</th>
<th>Percent Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Mathematics Test**

<table>
<thead>
<tr>
<th>Number of Questions</th>
<th>Number Correct</th>
<th>Percent Correct</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
GCT DATA FORM

GCT Code #

<table>
<thead>
<tr>
<th>Sex</th>
<th>Race</th>
<th>IEP Date</th>
<th>GCT Date</th>
</tr>
</thead>
</table>

GCT-Reading

<table>
<thead>
<tr>
<th># Items</th>
<th># Correct</th>
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</thead>
<tbody>
<tr>
<td>1. Understanding safety warnings</td>
<td>20</td>
</tr>
<tr>
<td>2. Completing forms and applications</td>
<td>10</td>
</tr>
<tr>
<td>3. Using reference sources</td>
<td>10</td>
</tr>
<tr>
<td>4. Determining main ideas</td>
<td>10</td>
</tr>
<tr>
<td>5. Using documents</td>
<td>60</td>
</tr>
</tbody>
</table>

GCT-Math

<table>
<thead>
<tr>
<th># Items</th>
<th># Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Read and work numerals</td>
<td>3</td>
</tr>
<tr>
<td>2. Compare numerical values</td>
<td>3</td>
</tr>
<tr>
<td>3. +, -, x, + whole numbers</td>
<td>12</td>
</tr>
<tr>
<td>4. +, -, x, + decimal fractions</td>
<td>9</td>
</tr>
<tr>
<td>5. Multiple simple fractions</td>
<td>3</td>
</tr>
<tr>
<td>6. Express percents as decimals</td>
<td>3</td>
</tr>
<tr>
<td>7. Express fractions as decimals</td>
<td>3</td>
</tr>
<tr>
<td>8. Find a given percent of a number</td>
<td>3</td>
</tr>
<tr>
<td>9. Draw conclusions from graphs</td>
<td>9</td>
</tr>
<tr>
<td>10. Determine distance from a map</td>
<td>3</td>
</tr>
<tr>
<td>11. Read tax, interest and insurance tables</td>
<td>6</td>
</tr>
<tr>
<td>12. Know concepts of parallelism and parts of circle</td>
<td>6</td>
</tr>
<tr>
<td>13. Determine perimeter and area of rectangle</td>
<td>6</td>
</tr>
<tr>
<td>14. Know measurement units and determine elapsed time</td>
<td>9</td>
</tr>
<tr>
<td>15. Solve practical problems in personal finance</td>
<td>21</td>
</tr>
</tbody>
</table>

Score
Evidence of Inclusion of Specific GCT Skills in the Annual Goals and Short-Term Instructional Objectives of the 1980 and 1981 IEPs of Selected Virginia High School Learning Disabled Student

1. Student/Division Identification Data - Diploma Program
   p = present; np = not present

   1. p_ np_ indication of type of diploma program

      Diploma Program Indicated
      ___ regular diploma
      ___ IEP diploma
      ___ certificate
      ___ other

II. Statement of Present Level of Performance

2. p_ np_ standardized evaluation data

      ___ WISC
      ___ WRAT
      ___ PIAT
      ___ KEY MATH
      ___ WOODCOCK
      ___ Others (Specify)

3. p_ np_ indication of whether student will take GCT

4. p_ np_ indication of when student will take GCT

5. p_ np_ indication of students strengths in mathematics in relation to skills to be assessed by GCT

6. p_ np_ indication of students weaknesses in mathematics in relation to skills to be assessed by GCT

7. p_ np_ indication of students strength in reading in relation to skills to be assessed by GCT
8. p np indication of students weaknesses in reading in relation to skills to be assessed by GCT

III. Statement of Annual Goals

9. p np specific statement referring to the GCT as a basis for annual goal development

10. p np specific statement of GCT accommodations for student

11. p np specific annual goal statement related directly to anticipated student GCT reading performance

12. p np specific annual goal statement related directly to anticipated student GCT math performance

13. p np statement of criteria for end of year performance evaluation for stated annual goals

14. p np CCT identified as an end of year performance evaluation for stated annual goals

15. p np statement which clearly indicates the specific instructional personnel responsible for providing instruction related to each annual goal

IV. Short-Term Instructional Objectives

16. YES__ NO__ Are specific statements of short-term instructional objectives stated in the IEP?

17. YES__ NO__ Are there specific short-term instructional objectives directly related to each annual goal?

V. Reading - Short-Term Instructional Objectives

18. YES__ NO__ Is the term "reading" used specifically to identify short-term instructional objectives?

19. YES__ NO__ Is there a specific statement referring to the GCT as a basis for the development of short-term instructional objectives in reading?

20. YES__ NO__ Do short-term instructional objectives in reading utilize the specific CCT reading skill descriptors?

Indicate which of the following GCT reading skill descriptors are used in specific statements of short-term instructional reading objectives:

___understanding safety warnings
___completing forms and applications
___using reference forms
___determining main ideas
___using documents
21. **YES** **NO** Does there appear to be a match between the reading skills to be assessed by the GCT and the content of the IEP statements of short-term instructional objectives in reading?

22. **YES** **NO** Is there a statement which clearly indicates the specific instructional personnel responsible for providing instruction for the short-term instructional objectives in reading?

**VI. Mathematics - Short-Term Instructional Objectives**

23. **YES** **NO** Is the term "math" or "mathematics" used specifically to identify short-term instructional objectives?

24. **YES** **NO** Is there a specific statement referring to the GCT as a basis for the development of short-term instructional objectives in math?

25. **YES** **NO** Do short-term instructional objectives in math utilize GCT math descriptors?

Indicate which of the following GCT math skill descriptors are used in specific statements of short-term instructional math objectives:

- [ ] ____ compare numerical values
- [ ] ____ +, -, x, + whole numbers
- [ ] ____ +, -, x, + decimal fractions
- [ ] ____ multiply simple fractions
- [ ] ____ express percents as decimals
- [ ] ____ express fractions as decimals
- [ ] ____ find a given percent of a number
- [ ] ____ draw conclusions from graphs
- [ ] ____ determine distance from a map
- [ ] ____ read tax, interest, and insurance tables
- [ ] ____ know concept of parallelism and parts of a circle
- [ ] ____ determine perimeter and area-rectangles
- [ ] ____ know measurement units - determine elapsed time
- [ ] ____ solve practical problems in personal finance

26. **YES** **NO** Does there appear to be a match between the math skills to be assessed by the GCT and the content of the IEP statements of short-term instructional objectives in math?

27. **YES** **NO** Is there a statement which clearly indicates the specific instructional staff personnel responsible for providing instruction for the short-term instructional objectives in math?
28. YES__ NO__ Is there a projected schedule for mastery of all short-term instructional objectives?

29. YES__ NO__ Is criteria for mastery of short-term instructional objectives clearly identified?

30. YES__ NO__ Are evaluation instruments or procedures for determining mastery of short-term instructional objectives identified?

31. YES__ NO__ Is the GCT identified as an evaluation instrument for determining mastery of short-term instructional objectives in math and reading?

VII. Judgement of IEP-GCT Relationship

32. YES__ NO__ In your judgement is there a clear, direct relationship between the instructional program outlined in this IEP and the identified skills of the GCT program?

33. YES__ NO__ In your judgement does this IEP provide a clearly defined basis for an instructional program focusing upon the skills to be assessed by the GCT?

34. YES__ NO__ In your judgement does this IEP clearly indicate the key instructional personnel responsible for developing, providing or coordinating a GCT skills instructional program?

35. YES__ NO__ In your judgement is there evidence contained in the IEP which indicates that students were provided the option of taking or not taking the GCT?

36. YES__ NO__ In your judgement does this IEP indicate that instruction has been planned which will ensure that information and skills related to minimum competencies are included as an integral part of this student's special education program?

37. YES__ NO__ In your judgement does this IEP contain evidence which suggests that the minimum competency skills in math and reading have served as a guide in the development of this student's special education program?

38. YES__ NO__ An instructional program designed to prepare the student for the GCT has been planned and will be implemented?
GCT-IEP EVALUATION FORM B  

Evidence of Inclusion of Specific GCT Skills in the Annual Goals and 
Short-Term Instructional Objectives of the 1980 and 1981 IEPs of Selected  
Virginia High School Learning Disabled Students 

IEP#____________________________________________  
IEP Date ________________________________________  
GCT Performance  
GCT Date ________________________________________  

1981 - Reading: pass(score) fail(score)  
Math: pass(score) fail(score)  

1. Student/Division Identification Data - Diploma Program  
p = present; np = not present  
1. p np____ Indication of type of diploma program  
Diploma Program Indicated 
__regular diploma  
__IEP diploma  
__certificate  
__other  

II. Statement of Present Level of Performance  
2. p np____ Standard evaluation data  
___WISC  
___WRAT  
___PIAT  
___KEY MATH  
___WOODCOCK  
___Others (Specify)  

3. p np____ Virginia Graduation Competency Test data  
4. p np____ Indication of whether student has taken GCT  
5. p np____ Indication of whether student will take GCT  
6. p np____ Indication of student's GCT-MATH pass/fail status  
7. p np____ Indication of student's GCT-READING pass/fail status  
8. p np____ Indication of student's specific strengths in GCT mathematics skills  
NA____ (passed GCT-MATH)
9. _ _ _ np __ indication of students specific weaknesses in GCT mathematics skills
   NA__ (passed GCT-MATH)
10. _ _ _ np __ indication of students specific strengths in GCT reading skills
    NA__ (passed GCT-READING)
11. _ _ _ np __ indication of students specific weaknesses in GCT reading skills
    NA__ (passed GCT-READING)

Specific reference to the Individual Skills Analysis (ISA) profile report of students' performance on the GCT.
12. Math - _ _ _ np __  Reading - _ _ _ np __
    NA__ (passed GCT-MATH)  NA__ (passed GCT-READING)

III. Statement of Annual Goals
13. _ _ _ np __ specific statement referring to students performance on the GCT
14. _ _ _ np __ specific statement referring to the GCT as a basis for goal development
15. _ _ _ np __ specific statement of whether student is scheduled to take GCT
16. _ _ _ np __ specific statement of GCT accommodations for student
17. _ _ _ np __ specific reference to the Individual Skills Analysis (ISA) profile report of students' performance on the GCT
18. _ _ _ np __ specific annual goal statement related directly to anticipated student GCT math performance on the next GCT
    NA__ (passed GCT-MATH)
19. _ _ _ np __ specific annual goal statement related directly to anticipated student GCT reading performance on the next GCT
    NA__ (passed GCT-READING)
20. _ _ _ np __ criteria for end of year performance evaluation for stated annual goals
21. _ _ _ np __ GCT identified as an end of year performance evaluation for stated annual goals
22. _ _ _ np __ statement which clearly indicates the specific instructional personnel responsible for providing instruction related to each annual goal
23. _ _ _ np __ evidence of update/revision of IEP annual goals on the basis of student GCT performance

IV. Short-Term Instructional Objectives
24. YES __ NO __ Are specific statements of short-term instructional objectives stated in the IEP?
25. YES NO Are there specific short-term instructional objectives directly related to each annual goal?

26. YES NO Is there a projected schedule for mastery of all short-term instructional objectives?

27. YES NO Is criteria for mastery of short-term instructional objectives clearly identified?

28. YES NO Are evaluation instruments or procedures for determining mastery of short-term instructional objectives identified?

V. Reading - Short-Term Instructional Objectives

29. YES NO Is the term "reading" used specifically to identify short-term instructional objectives?

30. YES NO Is there a specific statement referring to the GCT as a basis for the development of short-term instructional objectives in reading?

31. YES NO Is there a statement which clearly indicates the specific instructional personnel responsible for providing instruction for short-term instructional objectives in reading?

VI. GCT-Reading Short-Term Instructional Objectives

32. NA (passed GCT-READING)

33. YES NO Is there a specific statement referring to the ISA as a basis for the development of short-term instructional objectives in reading?

34. YES NO Do short-term instructional objectives in reading utilize the specific ISA reading skill descriptors?

35. Indicate which of the following ISA reading skill descriptors are used in specific statements of short-term instructional reading objectives:

   ___ understanding safety warnings

   ___ completing forms and applications

   ___ using reference forms

   ___ determining main ideas

   ___ using documents

36. YES NO Does there appear to be a match between the reading skills failed on the GCT as indicated by the ISA and the content of IEP statements of short-term instructional objectives in reading?

VII. Mathematics - Short-Term Instructional Objectives

37. YES NO Is the term "math" or "mathematics" used specifically to identify short-term instructional objectives?

38. YES NO Is there a specific statement referring to the GCT as a basis for the development of short-term instructional objectives in math?
39. **YES** **NO** Is there a statement which clearly indicates the specific instructional personnel responsible for providing instruction for short-term instructional objectives in math?

/111. **GCT-Mathematics Short-Term Instructional Objectives**

40. **NA** (passed GCT Math)

41. **YES** **NO** Is there a specific statement referring to the ISA as a basis for the development of short-term instructional objectives in math?

42. **YES** **NO** Do short-term instructional objectives in math utilize ISA math descriptors?

Indicate which of the following ISA math skill descriptors are used in specific statements of short-term instructional math objectives:

- ___ compare numerical values
- ___ +, - , x , + whole numbers
- ___ +, - , x , + decimal fractions
- ___ multiply simple fractions
- ___ express percents as decimals
- ___ express fractions as decimals
- ___ find a given percent of a number
- ___ draw conclusions from graphs
- ___ determine distance from a map
- ___ read tax, interest, and insurance tables
- ___ know concept of parallelism and parts of a circle
- ___ determine perimeter and area-rectangle
- ___ know measurement units-determine elapsed time
- ___ solve practical problems in personal finance

43. **YES** **NO** Does there appear to be a match between the math skills failed on the GCT as indicated by the ISA and the content of IEP statements of short-term instructional objectives in math?

IX. **GCT-Evaluative Measure**

44. **YES** **NO** Is the GCT identified as an evaluation instrument for determining mastery of short-term instructional objectives in math and reading?

X. **Judgement of IEP-GCT Relationship**

45. **YES** **NO** In your judgment is there a clear, direct relationship between
the instructional program outlined in this IEP and the identified skills of the GCT program?

46. YES__ NO__ In your judgement does this IEP clearly indicate the instructional personnel responsible for developing, providing or coordinating a GCT skills remedial program for a student who has failed one or both sections of the GCT?

47. YES__ NO__ In your judgement is there evidence contained in the IEP which documents that students were informed of their rights of taking or not taking the GCT?

48. YES__ NO__ In your judgement does this IEP indicate that instruction has been planned which will ensure that information and skills related to minimum competencies are included as an integral part of this students special education program?

49. YES__ NO__ In your judgement does this IEP contain evidence which suggests that the minimum competency skills in math and reading have served as a guide in the development of this students special education program?

50. YES__ NO__ In your judgement does this IEP indicate that instruction to improve the students deficiencies in the minimum competency areas of math and reading is a part of the short-term objectives of this students IEP?
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

Appendix E, (Commonwealth of Virginia Graduation Competency Test Mathematics, Form A.)

(Commonwealth of Virginia Reading Test, Form 1)
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United States Statutes at Large. Volume 89, 94th Congress, Part I


VITA

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Education

1972 Virginia Military Institute
   Lexington, Virginia
   B.A. - Economics

1973 The College of William and Mary
   Williamsburg, Virginia
   M.Ed. - Special Education

1979 The College of William and Mary
   Williamsburg, Virginia
   C.A.G.S. - Special Education Administration/Supervision

1983 The College of William and Mary
   Williamsburg, Virginia
   Ed.D. - School Administration - Special Education Administration/Supervision

Graduate Assignments

Graduate Assistant: School of Education, Department of Curriculum and Instruction, Division of Elementary and Secondary Education, College of William and Mary, Williamsburg, Virginia (1981-1982)

Graduate Assistant: School of Education, Division of Special Education, College of William and Mary, Williamsburg, Virginia (1978-1980)

Graduate Assistant: Work-Study Program, Office of the Associate Dean for Student Activities and Organizations, College of William and Mary, Williamsburg, Virginia (1976-1977)

Graduate Assistant: School of Education, Division of Special Education, College of William and Mary, Williamsburg, Virginia (1972-1973)
Professional Employment

Educational Coordinator
Adolescent Program, Maryview Psychiatric Hospital, Portsmouth, Virginia (1983-)

Consultant
Division of Special Education Programs and Pupil Personnel, Department of Education of the Commonwealth of Virginia (July 1981-July 1982)

Adjunct Faculty
School of Education, Division of Special Education, College of William and Mary, Williamsburg, Virginia (January 1980-May 1981)

Classroom Teacher
ED/LD Resource Program, Gloucester Middle School, Gloucester County Public Schools, Gloucester, Virginia (1977-1978)

Classroom Teacher
ED Self-Contained Classroom Program, Center for Effective Learning, Virginia Beach City Public Schools, Virginia Beach, Virginia (1974-1976)

Classroom Teacher
ED/LD Resource Program, Fredericksburg Regional Learning Center, Spotsylvania County Public Schools, Spotsylvania, Virginia (1973-1974)

Professional Certification
Postgraduate Professional Certificate—Commonwealth of Virginia

Endorsements:
Supervisor of Special Education
Middle School Principal
Elementary School Principal
Teacher-Special Education-ED
Teacher-Special Education-LD
Teacher-Economics
ABSTRACT

In response to the decline in student achievement test scores during the past decade and the perceived erosion of confidence in the quality of public education, a number of states have initiated legislative or administrative action to develop and implement a variety of statewide minimum competency testing (MCT) programs. As of January 1, 1980, thirty-six states, including the Commonwealth of Virginia, had mandated some form of MCT programs for elementary and secondary school students.

In Virginia and in at least five other states a major purpose of MCT programs is to ensure, through a uniform statewide test, that students who are awarded a standard high school diploma have achieved a minimum level of proficiency in specified educational skills.

Handicapped and non-handicapped students of the graduating class of 1981 were the first to be required to meet the Virginia Graduation Competency Test (GCT) requirement as a criterion of eligibility for the award of a standard high school diploma.

Establishment of a direct and clearly defined working relationship between MCT programs and the IEP
has been advocated as an ethical and reasonable means of ensuring that handicapped students will be provided fair and meaningful opportunities to benefit from instruction in the skills assessed by state and local MCT programs. This study was designed to examine the relationship between the Virginia Graduation Competency Test (GCT) assessment of student proficiency in specific educational skills and the educational skills content of the annual goals and short-term instructional objectives of the individualized education programs (IEPs) of handicapped high school students.

A total of 286 IEPs (N=1981=124; N=1982=162) representing 162 LD students and 30 ED students who took the March 1981 GCT were obtained for examination from 82 of 93 (88%) local Virginia school divisions which administered the March 1981 GCT to LD and ED high school students. IEP statements of students present level(s) of performance, annual goals and short-term objectives were examined for specific GCT skills content and performance related data.

The findings of this investigation suggest that the extent to which local school personnel are incorporating specific GCT skills into the educational programs provided for handicapped students through the IEP may be less than adequate to document systematic planning for meeting the GCT skills instructional needs of Virginia's handicapped students.