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ABSTRACT

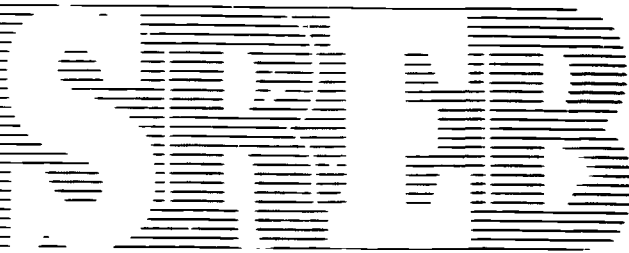
Standards and assessments used by Southern Regional Education Board (SREB) states to place students in either regular college-level courses or remedial/developmental courses were investigated. Questionnaires were sent to 489 two-year and four-year institutions, of which 404 responded. Information was collected on the specific assessments (tests) used and the scores required to place students in either the regular or remedial/developmental courses. These data were compiled for each of the 15 SREB member states in the curricular areas of reading, writing, and mathematics. The SREB states used almost 100 tests in reading, writing, and mathematics for placement purposes. The average number of placement tests used per state in the region was eight in reading, eight in mathematics, and seven in writing. While 121 institutions used the Nelson Denny Reading Test, 72 used the American College Testing English Subtest. However, some individual tests were used by only one institution. Twelve of the 15 SREB states did not have official state policies to govern placement testing at the college level. Differences in low and high cut-off scores made it difficult to determine what, if any, consensus there might be for beginning degree-credit work. (SW)

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Readiness For College: Should There Be Statewide Placement Standards?

Ansley A. Abraham, Jr.

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Southern Regional Education Board



ACADEMIC PLACEMENT STANDARDS: THEIR EFFECT ON COLLEGE QUALITY

What level of skills should entering college students have in reading, writing, and mathematics in order to begin college-level courses? This is a fundamental question for colleges and universities who are working to improve undergraduate educational programs and curricula. The answers are surprising.

Standards used by higher education institutions to place students in college-level or remedial/developmental work vary widely. A recent Southern Regional Education Board (SREB) study of its 15 member states,^{*} found that entry-level placement standards for reading, writing, and mathematics varied from as low as the first percentile to as high as the 94th percentile. That study, however, did not address the use of placement standards nor the variation of these same standards within a state or higher education system. It is at these levels where the most significant policy decisions will be made to bring about improvement in the quality of undergraduate education. This raises the question, "Are there wide variations in college-level placement standards among institutions within the same state/higher educational system?"

The current SREB study shows that there are substantial differences at the state or system level concerning the criteria employed to place students in either college-level or remedial/developmental work. In other terms, there is a lack of consensus concerning the skills and knowledge necessary for college-level study. What tests and test scores should be used to accurately determine students' mastery of required skills and knowledge?

^{*}The SREB states are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

The implications of answering these questions are obvious. If there is a lack of consensus on what constitutes college-level work, then it is difficult to raise standards and improve undergraduate education. Why is it important to improve undergraduate education? Because about 85 percent of all students enrolled in college are studying for the associate of arts or baccalaureate degree. For most students, a "college education" means an undergraduate degree. This fact alone should justify the need for a major effort to improve undergraduate education. Regrettably, the fact is that today the quality of undergraduate education is unacceptably low in the nation's colleges and universities. That is the conclusion of a host of recent reports from state and national commissions. Recommendations made in these reports suggest that improvements in undergraduate programs will be an arduous and long affair involving students, faculty, and administrators—and requiring support by legislators and the public. Through the involvement of all segments of the educational community, it is more likely that institutions will provide undergraduate experiences of the highest quality possible.

"How do higher education institutions ensure quality undergraduate experiences for students?" This is a multifaceted question in need of a complex response. If there were a single or simple answer to this, states and special commissions would not be debating the matter and proposing a host of actions. This paper will focus on an important part of the answer—placement practices and standards in higher education. Specifically, this study attempts to answer the basic question, "Are there substantially different standards and assessments used within a state to place students in regular college-level courses or remedial/developmental courses?" This question is fundamental to improving undergraduate education because by defining college-level work at the state or system level, higher education is then able to:

- Identify the extent of the problem of college-bound students who are not prepared for college-level courses;
- Establish a clearer definition of what college-level is;

- Send a clear message to the high schools about the expected skill and knowledge levels necessary to begin college degree-credit work;
- Provide added value to the baccalaureate and associate degrees; and
- Provide a consistently clear and known level of performance which students must meet to pursue a college degree.

Academic Placement

What is "college-level placement"? For the purpose of this study, placement is the process of deciding whether students already admitted to college have the skills and knowledge necessary to begin courses that count toward an undergraduate degree. If they do, the entering students are placed in degree-credit courses; if they do not have these skills and knowledge, the students are placed in remedial/developmental courses.

Placement occurs after admission. Too often "admission" and "placement" are used interchangeably. Students may be admitted, yet lack the skills needed to perform college-level work; as a result remedial work is required. This occurs in open-door institutions—as might be expected—and also in institutions that have entry standards. Obviously, in institutions that are "truly" selective, students who are admitted are likely to have the necessary skills to be placed in degree-credit courses.

New Questions About Collegiate Quality

Quality issues in the schools have been on the public agenda for several years now. But it is only in the past few years that the quality of undergraduate programs—with the possible exception of teacher education—has emerged as a public policy issue as well as an institutional one. As early as 1981 in The Need for Quality, SREB stressed the link between the schools and higher education and offered 18 recommendations to improve undergraduate teacher education programs. Institutional responses have taken many forms; primary among them is the tightening of academic standards—standards for entry into

teacher education programs, standards for progression, and standards for exit. However, as the application of standards spread to other programs and institutions established new academic standards and requirements, the question that simultaneously needs answering concerns what level of academic skills and knowledge do students need to begin college-level or degree-credit work.

SREB addressed the issue of standards in "College-Level Study: What Is It?" (Abraham, 1986) by identifying the variety of tests and scores used to place students in college-level courses or remedial/developmental courses. The study found little consensus among higher education institutions as to what constitutes beginning "college-level work"—What skills? What knowledge? The purpose of the study was to identify placement standards at the regional level. As a result, the findings presented data in an aggregate format—regional totals for all 15 SREB states. This format has obvious limitations in terms of prohibiting the determination of whether within states there is consensus on standards for beginning college-level or degree-credit work. The current study responds to this limitation by examining placement standards (tests and tests scores) within each state for determining entering college students' proficiencies in the areas of reading, writing, and mathematics.

The SREB Survey on College Placement Standards

The survey included 489 public two-year and four-year institutions which award the baccalaureate or associate degree in the 15 SREB states. Questionnaires were sent to 186 four-year institutions and 303 two-year institutions. The response rates were 88 percent and 79 percent, respectively. The overall response rate was 83 percent or 404 institutional respondents. Such a high response rate would seem to indicate strongly the interest and concern higher education institutions have for the high proportions of entering students who are underprepared for college-level work. Equally important is what actions institutions have taken in terms of policies, standards, and programs.

The survey gathered information on the specific assessments (tests) used and the scores on those assessments required to place students in either remedial/developmental courses or regular college-level courses. These data were compiled for each state in the curricular areas of reading, writing, and mathematics.

Discussion of Findings

To answer the study's central question—"Are there substantially different standards and assessments used by institutions of higher education within a state to place students in courses that earn degree credit?"—two detailed questions have to be answered first:

- 1) How many tests in reading, writing, and mathematics are used for college-level placement?
- 2) What cut-off scores on those same tests in reading, writing, and mathematics are used for college-level placement?

In answering these questions, it is helpful to know what current state policies are toward college-level placement. Only three SREB states, Florida, Georgia, and Tennessee, currently have statewide placement standards in effect; Arkansas and Texas have legislative mandates for developing such standards. Five other SREB states are at some stage of placement program consideration; five states have yet to take formal action (Table 1).

To answer the first question, "How many tests?", SREB states use almost 100 tests in reading, writing, and mathematics for placement purposes. Specifically, 30 different tests are used for placement purposes in reading, 30 in writing, and 35 in mathematics.

Table 1
Initiatives to Improve Undergraduate Education Through
Statewide Tests for Placement in Degree-Credit Work
1987

| | |
|----------------|--|
| Alabama | Under consideration |
| Arkansas | Placement testing mandated (effective 1988) |
| Florida | Qualifying score on 1 of 4 (ACT, SAT, MAPS, or ASSET)* |
| Georgia | Qualifying score on SAT or state basic-skills exam |
| Kentucky | No formal action |
| Louisiana | Under consideration |
| Maryland | Institutional standards required in two-year colleges |
| Mississippi | No formal action |
| North Carolina | No formal action |
| Oklahoma | No formal action |
| South Carolina | Under consideration |
| Tennessee | ACT/AAPP for State College and University System |
| Texas | Placement testing mandated (effective 1989) |
| Virginia | Statewide standards study underway |
| West Virginia | No formal action |

* ACT (American College Testing Program); SAT (Scholastic Aptitude Test); AAPP (Academic Assessment Placement Program); ASSET (Assessment and Placement Services for Community Colleges); MAPS (Multiple Assessment Programs and Services)

SOURCE: A Progress Report and Recommendations on Educational Improvements in the SREB States, Southern Regional Education Board, 1987.

In every SREB state there is more than one means of determining college-level placement. The average number of placement tests used per state in the region is eight in reading, eight in mathematics, and seven in writing. The number of different placement tests used in any one curricular area range from as few as three in Georgia for mathematics to as many as 18 in North Carolina and Texas, also for mathematics (Table 2).

Table 2
 Number of Different Tests in Reading, Writing,
 and Mathematics Used for College-Level Placement,
 by State
 1986

| State | Number of Institutional Respondents | Reading | Writing | Mathematics |
|----------------|---|---------|---------|-------------|
| Alabama | 27 | 6 | 10 | 11 |
| Arkansas | 17 | 9 | 7 | 9 |
| Florida | 32 | 10 | 8 | 11 |
| Georgia | 30 | 4 | 4 | 3 |
| Kentucky | 18 | 5 | 5 | 4 |
| Louisiana | 12 | 5 | 3 | 5 |
| Maryland | 24 | 6 | 7 | 9 |
| Mississippi | 20 | 10 | 9 | 7 |
| North Carolina | 62 | 16 | 14 | 18 |
| Oklahoma | 17 | 6 | 6 | 7 |
| South Carolina | 19 | 7 | 6 | 9 |
| Tennessee | 19 | 5 | 4 | 9 |
| Texas | 65 | 14 | 14 | 18 |
| Virginia | 32 | 7 | 5 | 7 |
| West Virginia | 11 | 9 | 8 | 4 |

SOURCE: A Report on College-Level Remedial/Development Programs in SREB States, Ansley A. Abraham, Jr., Southern Regional Education Board, 1987.

The wide ranges in the number of tests used for college-level placement are at least in part attributable to two factors. Generally speaking, the more colleges and universities in a state, the larger the number of different tests used for placement. Second, a likely explanation would be that only three SREB states currently have statewide placement standards; in most SREB states colleges and universities have institutional autonomy to establish their own standards.

North Carolina and Texas have a comparatively large number of institutions and institutional autonomy to establish standards. Consequently, in North Carolina the 62 institutions that responded to the survey reported using 16 placement tests in reading, 14 in writing, and 18 in mathematics. Similarly, the 65 responding institutions in Texas reported 14 placement tests in reading, 14 in writing, and 18 in mathematics. It should be noted that this pattern in Texas will change in 1989 when all students entering post-secondary institutions will be required to be assessed for placement purposes.

Georgia, which has a statewide policy covering over 30 colleges and universities, uses only four reading tests, four writing tests, and three mathematics tests for placement purposes. In Florida, which also has statewide placement standards, the standards include official recognition of four tests (ACT, SAT, MAPS, or ASSET*) for college-level placement. However, as many as 10 tests in reading, 8 in writing, and 11 in mathematics were actually being used for placement by Florida community colleges and universities.

The discrepancy between what is officially recognized for use by institutions and what is actually being used points to another problem facing states in establishing statewide minimum placement standards. This problem focuses on how

* ACT (American College Test); SAT (Scholastic Aptitude Test); MAPS (Multiple Assessment Programs and Services); ASSET (Assessment and Placement Services for Community Colleges).

readily institutions will accept new tests and new testing procedures. There appears to be a kind of "educational testing inertia"—once a particular test is in use and its testing procedures are established, the tendency is to continue using the same test and the same testing procedures. Certainly any changes that occur under these conditions happen slowly or, at best, with very deliberate speed.

The overriding implication of all of these findings is that many considerations must be made to establish successful placement standards.

To answer the second question, "What cut-off scores are used for college-level placement?", the results are presented by state for reading, writing, and mathematics (see Appendix, Tables A, B, and C). The data in these tables are ranked from most to least frequently used placement tests to more clearly depict the range and variety of tests used by state and in the region. The ranking is based on the total number of institutions that use any individual placement exam. The range of use varies at the high end—as many as 121 institutions use the Nelson Denny Reading Test (Table A), 72 use the ACT English Subtest to determine writing skills (Table B), and in mathematics 115 use an institutionally developed test (Table C). On the opposite end, some individual tests are used by only one institution. This is true for reading, writing, and mathematics. These data show the different tests used for placement purposes, as well as how often they are used by institutions in the states to determine readiness for college.

SREB's earlier study, "What is College-Level Study?", gave only a regional analysis of the variety of placement standards used to begin college-level work. This was done to obtain a reference point of where the region was in terms of establishing standards for undergraduate education. This did not allow for reviewing individual state characteristics or drawing conclusions about individual state placement standards. If there is a wide variety and large variation in the use of placement tests and scores on the same test at the state level, then this would show conclusively, not only as a region but for individual states, that there is a lack of consensus on what constitutes college-level/degree-credit work.

The data for reading, writing, and mathematics show clearly that states are using a variety of tests to place beginning college students. Additionally, there are differences—many times very large differences—within a state between the highest and lowest cut-off scores for placement tests.

It is clear that certain tests—usually two or three in each state—are more popular than any others. This occurs in spite of the fact that 12 of the 15 SREB states do not have official state policies to govern placement testing at the higher educational level. Moreover, the most frequently used tests in any one state will not necessarily be the most frequently used in any other state. For example, the most frequently used reading test in North Carolina is the Nelson Denny Reading Test—used by over one-third of the institutions. In Alabama, the ASSET Reading Test is the most widely used. The same observation may be made for other states and for placement tests in the writing and mathematics curricular areas.

Perhaps it is not too surprising that there are many different tests used within each state for placement purposes. Higher education institutions fulfill many roles, from the open door, two-year colleges to the very selective major research universities. What is defined as beginning college-level work will not be the same for all institutions in a state owing to the varied missions. However, there should be consensus on a certain level of skills and knowledge—"a floor"—below which no institution will award credit toward the college degree. This "floor," represented by levels of student skills in key areas, needs to be carefully thought out and justified educationally in terms of the skills a student must possess to learn at the college level. There is little evidence to show that this practice is widely followed.

The numbers shown in parentheses in Tables A, B, and C represent the lowest and highest scaled scores on the tests used to place students at the college level. (These scores are shown only for tests used by four or more institutions in each state.) In Alabama, for example, cut-off scores on the Nelson Denny Reading Test range from 8th to

12th grade reading levels (Table A); in Texas, cut-off scores range from 11 to 16 on the ACT English Subtest (Table B); and in Arkansas, cut-off scores range from 10 to 16 on the ACT Math Subtest (Table C). Implicit in the cut-off scores are institutional expectations of the skills and knowledge necessary to begin degree-credit work. Obviously, the skills and knowledge needed to produce a score at the low end of the range are not the same as those needed to produce a score at the high end? It is clear then, that differences in low and high cut-off scores make it difficult to determine what, if any, consensus there might be for beginning degree-credit work--Is it the lower cut-off score? Is it the higher cut-off score? Or, is it somewhere in-between?

What about the comparability of tests and cut-off scores within the same state. This is important when establishing a state or institutional system's minimum level for college-level placement. State or institutional systems that use a number of different placement tests must know whether the cut-off scores for placement are equivalent. For example, is the cut-off score on the Nelson Denny Reading Test comparable to the cut-off score on the Stanford Diagnostic Reading Test? Or, is the cut-off score on the SAT-Math Test comparable to the cut-off score on the ACT-Math Subtest?

To make these comparisons it is necessary for the test scores to be on the same scale--tests are normally scaled differently. For example, the SAT is scaled from 200 to 800 and the ACT from 1 to 36. Any direct comparisons would be erroneous. By converting test scores to their percentile equivalents, comparisons are possible. Percentiles are derived scores that indicate the percentage of people or scores that occur at or below a given test score. A test score (27) at the 11th percentile rank means that 89 percent of the students who took the test had a score at or above this level and that only 10 percent had scores that were lower than 27.

Caution must be used when making direct or cross comparisons of percentile ranks on different tests. Specifically, if two students score at equivalent percentile ranks, it does not necessarily imply that those students have equivalent test scores. Further,

it does not imply that a student taking two different tests will necessarily score at the same percentile rank on both exams. For example, a score at the 63rd percentile rank on the ACT is not necessarily equivalent to a score at the 63rd percentile on any other test. Other factors must be considered including purpose, design, norming, and so on. However, percentiles are generally regarded as the safest and most reliable way of presenting test results.

To compare the low and high cut-off scores on the different tests, scores have been converted to the same scale—their percentile equivalents. For example, SAT-mathematics placement scores in Texas ranged from 320 to 470 (Table C, Test No. 66); ACT-mathematics scores in Arkansas ranged from 10 to 16 (Table C, Test No. 65). When converted to percentile equivalents for comparisons, the SAT-mathematics scores are respectively, 9 and 48; scores on the ACT-mathematics are 22 and 42. It is clear that there is quite a range between the low and high cut-off scores and some differences between tests.

This technique, however, is not without drawbacks. Foremost among the limitations is the need to have norm-referenced tests. Norm-referenced tests are given under the same or similar conditions to students who exhibit the same or similar demographic characteristics (age, sex, race, and so on). All tests are not normed, and even fewer are nationally normed, thus making it impossible to derive percentile ranks. Abraham (1986) analyzed these same data by comparing nationally-normed tests that were used for college-level placement. The results clearly showed the lack of consensus about placement standards in the SREB region. Examination of three of the most frequently used nationally-normed placement tests in reading, writing, and mathematics help to dramatize this point (Table 3). Even for the lowest cut-off scores there are variations in placement standards. For example, in reading and writing the percentile equivalent cut-off scores ranged from the 1st percentile to the 9th percentile and in mathematics from the

9th to 16th percentile. It is clear that these scores are so low that very few students scored lower. Further, in terms of undergraduate placement, these percentiles/scores represent the absence of almost any standards. Not only is it unclear where the "floor" is—skills and knowledge needed to begin college-level work—but the scores are so low as to render themselves virtually meaningless in the establishment of standards and improvement in the quality of undergraduate education.

Table 3
Low Cut-Off Scores for Placement in College Curriculum
with Percentile Equivalents of the Three Nationally Normed Tests
Used Most Frequently by SREB Survey Respondents
1986

| Placement Test | Lowest Cut-Off Scores * | Percentile Conversion of Cut-Off Scores ** |
|--------------------|-------------------------|--|
| <u>Reading</u> | | |
| Nelson-Denny | 7 | 1 |
| ACT-Combined | 10 | 9 |
| MAPS-DTLS | 11 | 1 |
| <u>Writing</u> | | |
| ACT-English | 9 | 6 |
| TSWE | 19 | 1 |
| ACT-Combined | 10 | 9 |
| <u>Mathematics</u> | | |
| ACT-Math | 8 | 16 |
| SAT-Math | 320 | 9 |
| MAPS-DTMS | 1 | 14 |

* Cut-off scores are the scaled scores, NOT raw scores.

** Percentile ranks based on 1985 high school graduates.

It is not difficult to transfer the same logic used in Table 3 to the data shown in Tables A, B, and C. Although the arguments set forth in this study are supported by the data, it is possible that variations in tests and test cut-off scores would not necessarily indicate differences in curriculum standards. Instead, based on factors important to the specific missions and purposes of the institutions, there could be valid reasons for these variations. However, given the difficulty in "sorting through" to determine test comparability, it seems to make sense to limit the number of placement tests used by a state's public institutions to assure comparable standards. Nevertheless, all the necessary conditions--multiple tests in every state with regard to reading, writing, and mathematics and cut-off score variation on those same tests--are in place to suggest strongly that at the state level there is wide variation in what is defined as college-level or degree-credit work.

SUMMARY AND RECOMMENDATIONS

This study clearly shows that in the SREB region, and the situation is probably typical throughout higher education systems nationally, there is little consensus for institutions in the same state and higher educational system on college-level placement standards. For any state in the region, if two or more institutions use the same placement tests, the chances are high that different standards (scores) for placement will be used. As more institutions use the same tests, the wider the spread of placement scores/standards.

Why is placement so important? In the SREB region, 60 percent of the institutions report almost 40 percent of their beginning freshmen need remedial support. With numbers as striking as these, it is essential that states be able to determine the extent of the problem of college preparation and that states or higher educational systems address this problem in a conscientious and systematic fashion. Without such efforts, states cannot provide adequate educational services or experiences for a large portion of college students seeking degrees. Furthermore, without placement standards, higher education has very little foundation on which to raise the overall quality of undergraduate education. Without such standards, deficiencies in student preparation are masked in everyday operations. Too, without standards, students may receive academic credit for less than degree-work; or worse, these students may graduate with baccalaureate and associate of art degrees. It is obvious that without placement standards, an erosion in the quality and value of two-year and four-year college degrees will result.

Clearly, an important need faces SREB states and higher education systems with regard to college-level placement and standards. This need is broadly-based and is addressed in the following recommendations:*

- States should require their higher education institutions to identify and implement statewide minimum standards and assessments for placement of all students in courses that earn credit toward the baccalaureate degree. These standards and assessments should relate to those competencies students should possess to be ready for college-level study.
- Faculty should determine the nature of these standards and assessments, and efforts at the individual institutions should be coordinated statewide. The standards and assessments should be evaluated periodically by groups of institutions and faculty to determine their validity.
- Students who do not qualify for placement in degree credit programs should be directed to separate remedial courses for which no degree credit should be granted. Exit standards and assessments should be set for these post-high school college preparatory programs. These exit standards should be based on outcomes and should be as high as the original placement standards.
- States should support necessary remedial education especially in those colleges that admit all or most students with a high school diploma. These programs will help make it possible for colleges to raise standards and maintain access at the same time.
- Each college and university should establish performance standards for its degree programs and develop systematic ways to assess the performance of all students. Students should be expected to meet these standards to qualify for a degree.
- The standards set by the individual colleges should be reviewed to assure that certain essential competency standards meet or exceed a statewide threshold, which should be established in consultation with the institutions.

* Cited from A Progress Report and Recommendations on Educational Improvements in the SREB States, SREB, 1987.

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APPENDIX

TABLE A

Frequency and Score Range of Reading Tests Used
for College-Level Placement, By State

| Test | AL | AR | FL | GA | KY | LA | MO | MS |
|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test |
| 01 | 9(8-12) | 9(10-13) | 3 | 1 | 7(10-12) | 7(11-12) | 13(10-13) | 5(10-12) |
| 02 | 2 | 4(13-16) | 14(13-17) | | 2 | 2 | | 6(10-14) |
| 03 | | | 13(11-18) | | 1 | | | |
| 04 | | | 16(339-560) | 8(330-360) | | | 1 | 1 |
| 05 | 11(19-37) | 2 | 5(21-44) | | | | | 1 |
| 06 | | | | | | | | |
| 07 | 1 | 1 | 6(9-17) | | 2 | 2 | | 3 |
| 08 | | | | | | | 4(25-53) | |
| 09 | | | 3 | | | 4(13-15) | | 5(11-12) |
| 10 | 1 | | | | | | | 4(10-12) |
| 11 | | | | | | | | |
| 12 | | | | | | | 2 | 1 |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | 1 | 3 | | 1 | | | |
| 16 | | | | | | | | |
| 17 | | | 1 | | | 1 | 1 | |
| 18 | | 1 | | | | | | |
| 19 | | | 1 | | | | | |
| 20 | | | | | | | | |
| 21 | | | | 1 | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | 1 |
| 26 | | | | | | | | |
| 27 | | | | | | | | |
| 28 | | | | | | | | |
| 29 | | | | | | | | |
| 30 | | | | | | | | |

NOTE: The number in parentheses represents the highest and lowest cut-off scores of tests used.

* Insufficient data to determine range

READING PLACEMENT TESTS

| | | |
|--|--|---|
| 01 Nelson-Denny Reading Test | 06 State/System Developed Test | 11 MAPS-DTLS-Logical Relationship |
| 02 American College Testing (ACT)-Combined | 07 ACT-Social Studies Subtest | 12 In-house/Institutionally Developed |
| 03 Multiple Assessment Programs and Services (MAPS)-Descriptive Test of Language Skills-(DTLS)-Reading | 08 MAPS-Comparative Guidance/Placement (CGP)-Reading Placement | 13 Assessment and Placement Services for Community Colleges-Reading |
| 04 SAT-Verbal | 09 ACT-English Subtest | 14 Comprehensive Test of Basic Skills (CTBS) |
| 05 ASSET-Reading | 10 Test of Adult Basic Education (TABE) | |

TABLE A (Cont.ued)

| | NC | OK | SC | TN | TX | VA | WV | TOTAL | Test |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | | |
| | 24(9-13) | 5(10-12) | 6 (*) | 1 | 21(7-12) | 9 (*) | 1 | 121 | 01 |
| | | 1 | | 1 | 10(12-24) | | 1 | 43 | 02 |
| | 2 | 2 | | 15(19-36) | 2 | | 2 | 37 | 03 |
| | 3 | | 1 | | 5(350-400) | | | 35 | 04 |
| | | | 1 | | 9(21-35) | | | 29 | 05 |
| | | | | | | | | | 06 |
| | | | | | | | | | 07 |
| | | | | | | | | | 08 |
| | | | | | | | | | 09 |
| | | | | | | | | | 10 |
| | | | | 9(16-19) | | | 1 | 10 | 11 |
| | 1 | | | | 3 | | | 10 | 12 |
| | 3 | 1 | | | | 3 | | 7 | 13 |
| | 7(9-12) | | | | | | | 7 | 14 |
| | 1 | | | | | | | 6 | 15 |
| | | | | | | | | | 16 |
| | | | | | | | | | 17 |
| | | | | | | | | | 18 |
| | | | | | | | | | 19 |
| | | | | | | | | | 20 |
| | 1 | | | | | | | 2 | 21 |
| | | | 1 | | | 1 | | 2 | 22 |
| | 1 | | | | | | 1 | 2 | 23 |
| | 1 | | 1 | | | | | 2 | 24 |
| | | | | | | | | 1 | 25 |
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- | | | |
|--|---|---|
| 15 MAPS-Reading (Self-scoring placement) | 20 Scholastic Aptitude Test (SAT)-Combined | 25 Stanford Test of Academic Skills |
| 16 California Achievement Test (CAT) | 21 Harcourt, Brace, Jovanovich Audio-Visual Technical Test of Reading | 26 GED Practice Test |
| 17 Stanford Diagnostic Reading Test | 22 Iowa Silent Reading Test | 27 Davis Reading Test |
| 18 McGraw-Hill Reading Test | 23 College Board Computer Placement Test-Reading | 28 Test of Academic Skills (TASK) |
| 19 ACT-Natural Science Subtest | 24 Reading for Understanding | 29 School and College Achievement Test (SCAT) |
| | | 30 Gates-MacGinitie |

TABLE B

Frequency and Score Range of Writing Tests Used
for College-level Placement, By State

| Test | AL | AR | FL | GA | KY | LA | MD | MS |
|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test |
| 34 | 5(13-16) | 8(13-18) | 15(13-17) | | 3 | 8(13-17) | | 8(10-14) |
| 35 | 3 | 3 | | | 1 | 3 | 4 | 2 |
| 36 | 5 | 2 | 1 | 3 | 6 | 4 | 6 | 2 |
| 37 | 2 | | 8(13-18) | | 4(11-16) | | | 5(10-14) |
| 38 | | | 14(30-43) | 1 | | | 8(26-36) | |
| 39 | | | 1 | 8(360-430) | | | 3 | 1 |
| 40 | | | | 28 | | | | |
| 41 | | | | | | | 4(29-50) | |
| 42 | 8(28-56) | 2 | 3 | | | | | 1 |
| 43 | | | 17(15-57) | | | | 2 | |
| 44 | | | | | | | | |
| 45 | | | 2 | | 1 | | | |
| 46 | 1 | | | | | | | 2 |
| 47 | | | | | | | | |
| 48 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | | | | | | | | |
| 51 | | | | | | | | |
| 52 | | | | | | | 1 | |
| 53 | | | | | | | | |
| 54 | 2 | | | | | | | |
| 55 | | | | | | | | 1 |
| 56 | | | | | | | | 1 |
| 57 | | | | | | | | |
| 58 | | | | | | | | |
| 59 | | | | | | | | |
| 60 | | | | | | | | |
| 61 | | | | | | | | |
| 62 | | | | | | | | |
| 63 | 1 | | | | | | | |

NOTE. The number in parentheses represents the highest and lowest cut-off scores of tests used
* Insufficient data to determine range

WRITING PLACEMENT TESTS

| | | | | | |
|----|---|----|--|----|--|
| 34 | ACT-English Subtest | 41 | HAPS-CGP-Writing Placement | 45 | HAPS-Written English Expression (Self-scoring placement) |
| 35 | In-house/Institutionally Developed | 42 | ASSET-Language Usage | 46 | Test of Adult Basic Education (TABE) |
| 36 | Writing Sample/Essay | 43 | TSWE-MAPS | 47 | Assessment and Placement Services for Community Colleges-Writing |
| 37 | ACT-Combined | 44 | Assessment and Placement Services for Community Colleges-Essay | | |
| 38 | Test of Standard Written English (TSWE) | | | | |
| 39 | SAT-Verbal | | | | |
| 40 | State/System Developed Test | | | | |

TABLE B (Continued)

| | NC | OK | SC | TN | TX | VA | WV | TOTAL | Test |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | | |
| | 1 | 6(9-18) | | 3 | 14(11-16) | | 1 | 72 | 34 |
| | 21 | 3 | 2 | | 14 | 8 | 2 | 66 | 35 |
| | 7 | | 7 | 1 | 3 | 7 | 3 | 57 | 36 |
| | | 1 | 1 | 1 | 13(12-20) | | 1 | 36 | 37 |
| | 2 | 1 | | | 4(35-50) | 3 | | 33 | 38 |
| | | | | | 11(370-900) | | | 26 | 39 |
| | 12(24-51) | | | | 2 | 4(1-3) | | 18 | 40 |
| | | | | | 4(35-40) | | | 24 | 41 |
| | | | | | 1 | | | 24 | 42 |
| | | | | | 1 | | | 20 | 43 |
| | | | | 15(4-4) | | | | 15 | 44 |
| | 4(43-46) | | | | | | | 7 | 45 |
| | | | 3 | | | | | 6 | 46 |
| | 2 | 1 | | | | 3 | | 6 | 47 |
| | | | | | 4(600-900) | | | 5 | 48 |
| | | | | | | | | 4 | 49 |
| | | | | | | | | 4 | 50 |
| | | | | | | | | 4 | 51 |
| | | | | | | | | 3 | 52 |
| | | | | | | | | 2 | 53 |
| | | | | | | | | 2 | 54 |
| | | | | | | 1 | | 2 | 55 |
| | | | | | | | | 1 | 56 |
| | | | | | 1 | | | 1 | 57 |
| | | | 1 | | | | | 1 | 58 |
| | | | | | | | | 1 | 59 |
| | | | | | | | | 1 | 60 |
| | | | | | | | | 1 | 61 |
| | | | | | | | | 1 | 62 |
| | | | | | | | | 1 | 63 |

- | | | |
|--|--|--|
| 48 SAT-Combined | 53 Comprehensive Test of Basic Skills (CTBS) | 59 Differential Aptitude Test (DAT)-Language Usage |
| 49 College Board-Written English Expression Test | 54 ASSET-Advanced Language Skills | 60 California Achievement Test (CAT) |
| 50 MAPS-DTLS-Usage Test | 55 ACT-Social Studies Subtest | 61 Cooperative School College Ability Test (SCAT) |
| 51 " PS-DTLS-Sentence Structure Test | 56 Stanford Test of Academic Skills | 62 College Board Computer Placement Test-Sentence Skills |
| 52 McGraw-Hill Basic Writing | 57 TASK | 63 The Cooperative English Test (CET) |
| | 58 Purdue High School Test of English | |

TABLE C

Frequency and Score Range of Mathematics Tests Used
for College Level Placement, By State

| Test | AL | AR | FL | GA | KY | LA | MD | MS |
|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test |
| 64 | 6 | 5 | 1 | | 6 | 6 | 12 | 2 |
| 65 | 4(11-16) | 7(10-16) | 20(9-21) | | 4(11-14) | 7(11-16) | 1 | 10(10-21) |
| 66 | | | | 8(330-380) | | | 4(350-525) | 1 |
| 67 | | | 16(1-23) | | | 1 | | |
| 68 | | | | 29 | | | | |
| 69 | | | | | | 1 | | |
| 70 | 1 | 1 | 4(13-16) | | | | | 3 |
| 71 | | | | 1 | | | 2 | |
| 72 | | | 5(10-24) | | | | 1 | |
| 73 | 8(16-30) | 1 | | | | | | |
| 74 | 3 | 2 | 1 | | | | | |
| 75 | 3 | 2 | | | 3 | | | 1 |
| 76 | | | | | | | 4(42-49) | |
| 77 | | | | | | | | |
| 78 | | 1 | 1 | | 1 | | | |
| 79 | | | 1 | | | | 1 | |
| 80 | | | | | | | | |
| 81 | | | | | | | | 1 |
| 82 | | | 1 | | | | | |
| 83 | | | | | | 1 | | |
| 84 | | | | | | | 1 | |
| 85 | 1 | | | | | | | |
| 86 | 1 | 1 | | | | | | |
| 87 | | | 20(340-440) | | | | | |
| 88 | | | | | | | | |
| 89 | | | | | | | | |
| 90 | | | | | | | | |
| 91 | | | | | | | 1 | |
| 92 | | | | | | | | |
| 93 | 1 | | | | | | | |
| 94 | | | | | | | | |
| 95 | | | | | | | | 1 |
| 96 | | | | | | | | |
| 97 | | | | | | | | |
| 98 | 1 | | | | | | | |

NOTE. The number in parentheses represents the highest and lowest cut-off scores of tests used
* Insufficient data to determine range

MATHEMATICS PLACEMENT TESTS

| | | |
|---|--|--|
| 64 In-house/Institutionally Developed | 72 MAPS-Descriptive Test of Skills (DTMS)-Arithmetic Skill | 79 MAPS-Elementary Algebra Self-scoring placement) |
| 65 ACT-Math Subtest | 73 ASSET-Numerical | 80 Assessment and Placement Services for Community Colleges-Math |
| 66 SAT-Math | 74 ASSET-Elementary Algebra | 81 Test of Adult Basic Education (TABE) |
| 67 MAPS-DTMS-Elementary Algebra Skills Test | 75 ASSET-Intermediate Algebra | 82 MAPS-Applied Arithmetic (Self-scoring placement) |
| 68 State/System Developed Test | 76 California Achievement Test (CAT) | |
| 69 MAPS-DTMS-Intermediate Algebra Skills Test | 77 SAT-Combined | |
| 70 ACT-Combined | 78 MAPS-Computation (Self-scoring placement) | |
| 71 MAPS-CGP-Mathematics C Tests | | |

TABLE C (Continued)

| | NC | OK | SC | TN | TX | VA | WV | TOTAL | Test |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|------|
| | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | No. Using Test | | |
| | 23 | 5 | 7 | 1 | 21 | 15 | 5 | 115 | 64 |
| | 1 | 5(8-19) | | 1 | 10(9-21) | | 1 | 71 | 65 |
| | 2 | | 1 | | 11(320-470) | | | 47 | 66 |
| | 6(9-15) | 1 | 1 | 4(16-15) | 5 (*) | 2 | | 36 | 67 |
| | | | | | | | | 29 | 68 |
| | | 1 | 1 | 14(13-24) | 2 | 2 | | 27 | 69 |
| | | 2 | | | 10(9-20) | | 1 | 26 | 70 |
| | 14(17-58) | | | | 1 | 3 | | 23 | 71 |
| | 4(14-19) | 1 | | 4(17-17) | 3 | 2 | | 22 | 72 |
| | | | | | 8(13-15) | | | 17 | 73 |
| | | | | | 1 | | | 7 | 74 |
| | | | | | 1 | | | 7 | 75 |
| | 3 | | | | 4(475-900) | 1 | | 6 | 77 |
| | 3 | | | | 1 | | | 6 | 78 |
| | | | | 1 | 1 | | | 5 | 79 |
| | | | | | | 2 | | 5 | 80 |
| | | | | | | | | 5 | 81 |
| | | | | | | | | 4 | 82 |
| | | | | | 2 | | | 3 | 83 |
| | | | | 1 | | | | 3 | 84 |
| | 2 | | | | | | | 3 | 85 |
| | | | 1 | 1 | 1 | | | 2 | 86 |
| | | | | | 2 | | | 2 | 87 |
| | | | | | | | | 2 | 88 |
| | | | | | | | | 2 | 89 |
| | | | | | | | | 2 | 90 |
| | | | | | | | | 2 | 91 |
| | 4(10-57) | | | | | | | 2 | 92 |
| | | | | | | | | 2 | 93 |
| | 1 | | | | | | | 1 | 94 |
| | | | | | | | | 1 | 95 |
| | 1 | | | | | | | 1 | 96 |
| | | | | | | | | 1 | 97 |
| | 1 | | | | | | | 1 | 98 |

83 Mathematical Association of America
 84 Mathematics Association, American Placement Test Battery
 85 Comprehensive Test of Basic Skills (CTBS)
 86 ASSET-College Algebra
 87 MAPS-Intermediate Algebra (Self-scoring placement)

88 College Entrance Examination Board-Math Achievement Test
 89 Speech/Word Mathematics Test
 90 MAPS-DTMS-Mathematics Graphs Test
 91 McGraw-Hill Math Test
 92 MAPS-CGP-Mathematics D and E Tests

93 Association of Community and Junior Colleges Math Placement Test
 94 Cooperative School College Ability Test (SCAT)
 95 Stanford Test of Academic Skills
 96 College Board Computer Placement Test-Elementary Algebra
 97 College Board Computer Placement Test-Arithmetic
 98 The Comprehensive Math Test (CMT)