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Multiple Choices for Standardized Tests

By William E. Sedlacek



Here are a few test questions for you and your board to ponder: Among the various factors your institution considers in the admissions process, how important are the results of standardized test scores? What other factors besides test scores and high school grades are important? Is the institution doing all it can to supplement quantitative data with other pertinent information that can help admissions officials make more informed judgments about applicants? Is the composition of the student body consistent with the institution's mission and purposes?

It's time for a fresh look at the use of test scores in student admissions.

How trustees, administrators, and faculty answer these questions will help determine the most appropriate uses of standardized test scores for your institution's admissions process. For this reason, trustees need to understand what these tests really measure and predict, how to use the tests appropriately, and the scope and implications of their institution's admissions process.

Trustees and regents—and the various institutional ranking and rating schemes—often place too much importance on standardized test scores. This issue of *Priorities* addresses some myths and issues concerning their use and explores alternative ways of thinking about admissions policies and practices.

By clearly articulating the college or university's mission, purposes, and academic priorities, the board plays a vital role in helping to determine the academic and social composition of the student body—and consequently the organization of teaching, advising, and services that students require. What abilities, backgrounds, and interests should students possess? Should the student body be diverse, or should it be more homogenous and specialized? Obviously, the characteristics of the student body should complement the institution's mission, purposes, and goals. For example, a college or university that seeks to produce graduates who can obtain jobs in the business world and be good citizens immediately upon graduation likely will recruit and select students who have characteristics that differ from an institution that strives to prepare many candidates for highly selective postgraduate schools.

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This Issue

Testing and the Demographic Imperative

By Daniel J. Levin

Why is AGB examining the use of standardized test scores in the college admissions process *now*? Simply stated, graduating from college leads to career and financial success, and to be excluded from that opportunity is unacceptable to most Americans. What's more, the competition to attend our nation's most selective schools is fierce, and the rewards can be great. And so society seeks dependable measures to determine who merits the privilege to enroll.

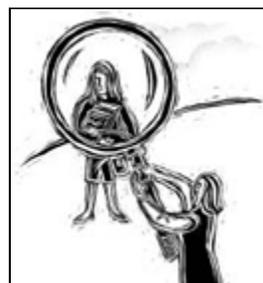
Unfortunately, the public has many misperceptions of the use of standardized tests in the admissions process. Many are unaware of exactly what the tests measure or predict, the extent to which admissions committees rely on test scores, and the variability in scores among racial and ethnic groups and between men and women. Too many people believe that any student who achieves a high standardized test score is more qualified for admission than a lower scoring student. That is not necessarily the case.

This issue of *Priorities* examines the role of standardized tests in admissions. It challenges governing boards to become more aware of the admissions process at their own college or university—regardless of whether it is a highly selective institution. It urges boards to explore with their academic leaders and admissions staffs whether the composition of the student body matches the institution's mission and goals, to define what constitutes "success" and "merit," and to consider the advantages of various combinations of criteria—including standardized tests—in the admissions process.

Why is this so important? Two reasons:

1. As pressure mounts to dismantle affirmative-action programs—or indeed if they are ruled illegal—colleges and universities are likely to see increasing and conflicting demands both to rely more heavily on such quantitative measures as standardized test scores and to consider alternative criteria in the admissions process.
2. Because the standardized test scores of black and Hispanic students as a group significantly lag those of whites as a group, increased reliance on these tests in admissions decisions could mean the resegregation of higher education. College Board President Donald M. Stewart recently told the *New York Times*, "We're looking at a potential wipeout that could take away an entire generation. The social cost of that would be too high. America can't stand that."

Applicants to the nation's colleges and universities increasingly come from a wide range of racial, ethnic, and socioeconomic groups. According to U.S. Census figures, college enrollments in the next 12 years will grow by more than 20 percent as the population of 18 to 24-year-olds increases by five million. By 2010, more than two-thirds of the nation's population increase will be



black and Hispanic Americans, with more than two million additional college-age individuals from among these two groups. For them, "access" is not an abstract concept; the opportunity to succeed in college is very real and pressing.

To accommodate this growing diversity, some institutions may need to adjust their admissions policies and practices. Board members, administrators, and faculty will face difficult questions as they consider the various abilities and characteristics their institution's prospective student body ought to possess: Are the admissions policies and practices the institution has used in the past appropriate for the future? To what extent does the institution rely on standardized test scores in the admissions process? What other assessment methods are available? If we incorporate new or alternative admissions criteria or methods, would we be discriminating against other applicants? How should the governing board work with the faculty and administration in reviewing admissions procedures?

We hope this issue of *Priorities* spurs conversation and action on your campus.

—Daniel J. Levin is vice president for publications at AGB.
Illustrations by Jae Wee

For trustees and others who guide colleges and universities, understanding the complexities of the admissions process is a daunting yet urgent task, made even more challenging because boards generally are kept at arm's length from these matters. Any discussion your board undertakes necessarily will address such sensitive topics as how the institution defines high academic standards, how students can best demonstrate their abilities, and whether certain admissions criteria discriminate against individuals or groups. At a time when competition for spaces in the most selective schools is increasingly fierce, and courts and legislatures are inserting themselves into the admissions process, governing boards must be willing to explore new thinking and new options with their academic leaders.

All institutions want to be certain incoming freshmen can perform the academic work that will be required of them. Most gear their admissions practices to this goal by relying heavily on a student's grade-point average, class rank, standardized test scores, and the rigor of the high school curriculum. But if an institution's definition of academic success takes into account other criteria—a student's creativity, adaptability, motivation, and ability to juggle tasks or take risks, for example—a closer look at alternative admissions criteria is necessary.

The fact is, nearly all colleges and universities already take criteria other than test scores and grades into account in their admissions processes, although some state universities are bound by "formula" admissions processes. One institution might want a flutist to complete its orchestra; another may seek to build a strong tennis team; another may give greater weight to the sons and daughters of alumni. So standardized test scores and high school performance are by no means the sole criteria for college admission. The question is: What other criteria does your institution consider relevant and appropriate—and why?

Institutional leaders concerned with retaining the largest possible proportion of the student body from one year to the next will want to know which types of students make it through their first year, their third year, who graduates in four years, and who eventually graduates after "stopping out." Depending on the goals of the institution and how its leaders define academic success, an institution may seek different combinations of characteristics in its incoming class. New methods of assessing applicants may be especially useful in predicting

which students will persist toward graduation.

Issues for Boards To Explore With Academic And Admissions Officers

1. Evaluate the admissions policies in terms of the institution's mission, purposes, and goals.
2. Define the criteria that mark "success" for students at this institution.
3. Review the current admissions procedures and practices, and look for evidence that they are valid and fair.
4. Consider the advantages of employing standardized testing, previous grades, interviews, portfolios, and noncognitive indicators in an admissions policy.
5. Study what combination of abilities is most appropriate in evaluating applicants for admission.
6. Determine whether new or alternative criteria will require a larger or more sophisticated admissions staff.
7. Request comprehensive follow-up reports of the admissions process for trends and evidence that it is effective in achieving the student body the board and faculty seek.
8. Find out who is not applying to the institution because they assume their test scores are too low.
9. If racial preferences in admissions are judged to be inappropriate or illegal, find out what admissions policies or procedures may be at risk.

The Challenge of Admissions

Selective undergraduate institutions that admit a relatively small number of students from a very large applicant pool have some unique admissions challenges. (Only about a hundred or so institutions reject more than one-half of their applicants.) Because they admit far fewer students than are qualified or capable, these colleges and universities must differentiate among applicants who appear to have similar credentials. At such institutions, skillful admissions officers who understand the various characteristics that have proved to be valid indicators of academic success can help ensure that high previous grades and test scores are not the sole admissions criteria. At the same time, fairness is crucial. It is difficult, but not impossible, to avoid bias that unduly favors certain kinds of applicants over others who might do as well or better academically.

A Brief History of the Sat and Act

Prior to the 20th century, few colleges and universities agreed on the academic preparation they should require of prospective students. This left secondary schools in the difficult position of trying to prepare students for a widely varying range of admissions requirements.

In 1900, the College Board was created at Columbia University to provide a forum in which secondary schools, colleges, and universities could communicate and begin to

standardize their course offerings and admissions requirements. Students who did well in these agreed-upon areas were assumed to make the best transition to college, and they were expected to perform well in their first year.

Examinations were a byproduct of the establishment of syllabi or course requirements on which the institutions could agree. In 1901, the College Board gave essay examinations in nine areas: English, French, German, Greek, Latin, chemistry, history, mathematics, and physics.



The content of the exams was determined by a committee consisting of subject-matter experts and teachers from colleges and secondary schools in the East. Of the first 973 candidates examined at the 69 established testing centers, 758 applied to either Columbia or Barnard. Applicants typically wrote eight papers each, and the papers were graded by a committee of readers.

By 1910, the number of candidates had grown to 3,631, and the philosophy of the exams was beginning to change. Amid much controversy, the College Board had shifted to "comprehensive examinations" in which students were not asked simply to demonstrate factual knowledge in an area but to show they could reason by relating discrete facts to one another and by developing principles that might apply in new situations.

In 1926, the first multiple-choice Scholastic Aptitude Test (SAT) was administered to 8,040 candidates. It contained nine "subtests." In administering this first SAT, the College Board stated the test "may help to resolve a few perplexing problems, but it should be regarded merely as a supplementary record. To place too great emphasis on test scores is as dangerous as the failure properly to evaluate any score or rank in conjunction with other measures and estimates which it supplements."

By 1929, the SAT produced only verbal and math scores. In the 1930s, the number of subtests was reduced, and an important assumption was made to standardize the SAT. The College Board assumed that the population taking the test each year would remain relatively stable, so it "normed" the test scores on the 1941 population of test takers (roughly 10,500 students, a large majority of whom were white males) so that all scores would be comparable from year to year. Thus, a score of 500 was defined as the average, and all scores were considered equivalent from one year to the next. With minor modifications and updates, the SAT remained in that form until 1993. In 1995, the test was "renormed," and 500 became the average score of that year's test-taking population. About 1.1 million graduating seniors have SAT scores; many take the exam more than once.

Several important points can be gleaned from the above history:

1. Although the SAT was developed to provide a "standard," it never was intended to be the primary factor employed in college admissions.
2. The SAT was designed primarily to predict first-year college grades.
3. The test originally was designed to measure attributes in a highly homogeneous population.

4. Despite various changes and versions, the SAT in essence measures what it did in 1929—verbal and math ability.

The American College Test (ACT) first was administered in 1959 as an alternative to the SAT and has been employed in many institutions, particularly in the Midwest. The intention was to go beyond what the SAT provided in content and service, and the ACT Assessment today is widely used for course placement and guidance. Currently, the ACT Assessment consists of tests in English, mathematics, reading, and science reasoning. In addition, it includes an interest inventory to help students in their educational and career planning and a "student profile section" to obtain noncognitive information about their experiences, goals, out-of-class accomplishments, extracurricular activities, and so forth.

Research shows that SAT and ACT test scores correlate highly with one another in comparable areas. In other words, those who score high or low on the SAT tend to score similarly on the ACT. Almost one million graduating seniors have ACT scores; many take the test more than once.

—W.E.S.

An institution that seeks to expand its applicant pool or change some admissions criteria to achieve a more diverse student body must be certain its admissions policies are applied fairly for all applicants. In the case of a college or university that represents a particular constituency—hearing-impaired students, state residents, technical students, or art students, for example—institutional leaders must be able to defend and explain any changes in the admissions policy to representatives of that constituency.

Less selective institutions typically have other challenges. If the admissions process is largely a routine or clerical operation, assessing large numbers of applicants may be difficult and costly. But admitting students without adequately evaluating their academic and retention potential can lead to problems. For example, any institution that admits applicants with varying abilities and characteristics must determine what kinds of academic and social-support programs such students may need. The admissions office may be the most practical place to evaluate whether certain students need a specific course load and sequence of courses, advising, counseling, or other services.

The Current State of Admissions Testing

Most colleges and universities require standardized tests—usually the SAT or ACT—in their undergraduate admissions process. Some institutions embrace the tests enthusiastically, perhaps believing they are the best predictors of academic achievement throughout the collegiate experience—an erroneous assumption. Others knowingly accept the limitations of such tests but depend on them as the most

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objective and efficient method of sorting large numbers of applicants. Still others depend on standardized test scores because they are compelled to do so by their legislatures or other agencies, such as the National Collegiate Athletic Association. Some institutions don't use them at all.

Since the vast majority of academic institutions require standardized tests as part of their

admissions process, board members first must ask what they measure and how well they work [see the sidebar on page 7]. Good evidence suggests standardized tests have the capacity to help predict first-year college grades, especially when used in conjunction with a student's high school record. In addition, it is well documented that students from families with higher income levels generally score better than students from lower income families. The ability of standardized test scores to predict grades decreases after the first, second, and subsequent years of college, as does the predictive validity of all other assessment methods. No standardized test does especially well at predicting retention or graduation rates.

Standardized tests used in undergraduate admissions are doing essentially what they originally were designed to do nearly 100 years ago [see the article on the history of testing on this page]. However, as applicants have become more diverse and institutional leaders more interested in knowing whether a student will succeed after the first year, officials should continue to seek alternatives that can supplement standardized test results. Although the tests have become an established part of the academic and popular culture, higher education leaders now need new ideas and techniques to help determine what constitutes merit and what indicates likely success beyond the first year of study.

Most scholars who research human abilities agree that the attributes first-year college students need to succeed differ from those they subsequently need. Typically, the first year of any curriculum is more didactic. Students learn facts and basic concepts in different disciplines. In later years, students are required to be more creative and to synthesize and reorganize their thoughts. Many students who do not do well in the first year often shine in their majors and in their later years of study.

Yet admissions policies that depend too much on standardized tests will overlook many excellent students whose abilities are not fully evident until they reach higher level course work. Standardized tests do not measure motivation, study habits, personal or professional goals, and other factors that can affect academic performance and persistence to graduation. This is one reason at least 280 public and independent colleges and universities do not use standardized tests to make admissions decisions about some or all applicants, according to the National Center for Fair & Open Testing.

The Issue of Fairness

Since the 1960s, many scholars and organizations have urged the testing industry and higher education institutions to make standardized tests and admissions policies more equitable for all candidates—a request easier to make than to meet. Two approaches have dominated the thinking in this area.

First, colleges and universities generally have altered admissions requirements or qualifications for some applicants. This often has resulted in resentment, lawsuits, and judicial intrusion into the academy. Yet institutions can seek well-qualified applicants from all groups and have fair policies and practices, provided they assess a broad range of abilities.

The second approach has been to fine-tune various admissions measures and techniques in an attempt to make them equally valid for everyone. If different types of applicants have varying experiences and different ways of presenting their attributes and abilities, however, it is unlikely that a single measure, test, or test question can be equally valid for all applicants.



The Summer 1996 issue of *Priorities* reviewed the complex legal arguments associated with affirmative-action policies. In that issue, attorney Martin Michaelson pointed out that it currently is unclear which logic will prevail: that expressed in the Bakke case, namely that race should be a valid consideration in postsecondary admissions, or that of the more recent Adarand and Hopwood cases, that all racial and ethnic distinctions should be held highly suspect or impermissible.

Given this inconsistency, what is the most reasonable position for an admissions office to take regarding affirmative action? Should the SAT or ACT and high school grades continue to be used for all students? Or should an institution accept lower scores on standardized tests for certain applicants? What about using newer measures designed to give a fairer picture of the potential of some students?

Faced with some stark statistics, many selective institutions will choose to broaden their admissions criteria: According to a 1997 article in the *Journal of Blacks in Higher Education*, only 659 of the 110,000 black college-bound seniors who took the SAT in 1996-97 scored above 700 on the math section, and only 900 scored above 700 on the verbal section.

Evaluating Admissions Policies

All institutions that use standardized tests should be certain the admissions office studies the predictive validity of the tests every three years or so by gender and by ethnic groups significantly represented on campus. Contrary to the advice of the testing companies, many institutions do not conduct this research, fail to do it well (they do not look beyond first-year grades at predictors of four-year grades and retention and graduation rates, for example), or ignore its implications. Institutional officials must look carefully at these predictive data and consider whether alternative admissions criteria can do the job better or more fairly.

How Good is the SAT at Predicting First-Year College Grades?

Based on a study of 685 colleges and universities, the College Board has determined how well the SAT, high school grade-point averages, and the SAT and grade-point averages combined predict first-year college grades in college. This study found that high school grades predict first-year college grades better than the SAT alone but that a

slightly better predictor is obtained when grades and test scores are combined.

The study expresses its findings in "correlation coefficients." A score of 1.0 represents a perfect correlation between the variable and first-year grades. For all schools in the study, the best possible weighting of SAT verbal and math scores produced an average correlation coefficient of .42. For high school grade-point averages as a single predictor, the figure was .48; for the SAT and GPA combined the figure was .55.

What do these numbers really measure, and what do they mean? Do they imply a strong or a weak correlation with a student's first-year grades? Researchers use another number called the "explained variance" in conjunction with the correlation coefficient. This figure is expressed as a percentage and explains the difference in first-year grades between any two students. To arrive at this figure, the correlation coefficient is squared. Hence: The SAT alone represents 18 percent of the variance in first-year grades for students in this study. *Put another way, 82 percent of the variance is explained by factors other than the SAT, and no one can specify with any precision what these factors are.* For high school GPA, the explained variance is 23 percent, and for the SAT and GPA combined, the figure is 30 percent.

All of these predictor variables have a lower correlation—and therefore explain less of the variance—with four-year grades, graduation rates, and other longer term educational outcomes.

Officials who recognize the limitations of standardized tests and who wish to review their admissions policies and practices will need to consider (1) whether to use these tests and other traditional measures in the future and how to do so, and (2) whether to add information from newer assessment techniques that are being developed to tap the academic potential of a more diverse applicant pool. Many admissions committees already are using such techniques, and their use is likely to grow—along with the size of their admissions staffs.

Although standardized test scores—with or without high school grades to supplement them—do not correlate especially well with college grades or retention rates, an institution that supplements the standardized tests with alternative measures of aptitude can increase the number of qualified racial and ethnic-minority students it admits without using race or ethnicity in the selection process.

The work of Robert J. Sternberg, a psychologist at Yale University, helps explain why higher education officials may need to examine predictors of academic success and persistence to graduation other than standardized test scores. Sternberg proposes that a person may show ability in three basic ways. The first is "componential" or analytical intelligence, which is associated with traditional social and educational experiences. Standardized tests and high school grades rely heavily on this type of intelligence. Students from less traditional educational or sociocultural backgrounds are less likely to demonstrate their actual abilities in this way.

Sternberg's second category, "experiential" intelligence, involves the ability to be creative or adaptive. A person with unconventional or nontraditional experiences is likely to have developed this kind of intelligence to succeed in his or her social environment.

Why are test scores an important source of

information for admissions officers?

Grade inflation is a reality. College Board data show the percentage of college-bound students who reported an A average (A+, A, and A-) has increased from 28 percent to 37 percent in the last decade. Some colleges take this into consideration in determining the proper weight to accord test scores and grades.

High School GPA	1987	1997
A+ (97-100)	4%	6%
A (93-96)	11%	15%
A- (90-92)	13%	16%
B (80-90)	54%	49%
C (70-79)	19%	14%

For example, if an applicant has grown up in an environment where people routinely did not go to college, nonattendance becomes the norm, and success is defined in other ways. In such an environment, why did the applicant eventually conclude that a higher education degree was a worthy goal? What perceptions did the applicant have that his or her peers did not? What makes the applicant think he or she could succeed in college? These and many other questions can be part of an admissions process that emphasizes the assessment of creative adaptation.

The third type of intelligence Sternberg calls "contextual" or practical intelligence. This relates to a person's ability to understand and negotiate a "system" to his or her advantage. For a person with a nontraditional background, it is critical to know how to interpret his or her environment, to accomplish things despite social obstacles, and to foster his or her development within the context available at the time. For example, if racism or another obstacle has impeded an applicant's development, how did he or she surmount that hurdle? How have such applicants made the system work for them? How will the way the system works affect them in the future? Some applicants will have answers to such questions and be prepared to succeed in college. An individual's ability to learn to negotiate a system that may not always function in his or her best interest is a form of intelligence that can be considered in admissions.

Clearly, the social and educational experiences of many students differ dramatically from those of middle-class and upper class whites. This knowledge, grounded in Sternberg's theories, appears to offer a logical justification for adding other measures and techniques to the admissions process.

Interviews

One method of obtaining information on creative and systemic intelligence is to conduct applicant interviews. Historically, some admissions offices have used interviews for two reasons: (1) Interviews can provide otherwise unavailable information, and (2) they appear

to most observers to be a reasonable admissions requirement.

However, admissions interviews also have some disadvantages. First, they can be subjective, and their value can depend on the skill of the interviewer. One interviewer may see and hear things another does not. This problem can be reduced by requiring every interviewer to follow clear, predetermined protocols. On the other hand, such protocols also may inhibit the spontaneity needed to elicit appropriate or necessary information.

Interviews also are expensive and time consuming. It is possible, however, to use faculty, alumni, and other trained individuals to help cut costs. All applicants need not be interviewed; perhaps it is desirable to interview only those with certain backgrounds, experiences, or with borderline test scores and grades. As one part of an admissions process, interviews can be useful and effective, provided admissions criteria and goals are made clear to interviewers. But the process can be expensive, and there is considerable risk of inconsistency of results.

Portfolio Assessment

Some institutions use student portfolios to assess creative abilities. Students in the visual and performing arts typically compile evidence of their achievements in their portfolios. Portfolios also can help show potential in many other areas, including how an applicant has developed, overcome obstacles, and so forth. Some institutions permit portfolios to contain any item an applicant produces as well as evidence of his or her accomplishments in virtually any area of interest. Some institutions prescribe the range of contents and standards of evaluation.

Portfolios allow applicants to present themselves on their own terms, emphasizing any unique qualities or accomplishments they believe they have. This allows nontraditional applicants to be nontraditional. But, as with interviews, a disadvantage of portfolio assessment can be the inconsistency in assessing the portfolio contents. With some training and organization this can be overcome.

Like interviews, assessing portfolios can be expensive and time consuming. Sometimes the sheer volume of materials and storage space can be a problem. However, as with interviews, portfolios need not be used for all applicants, and students, alumni, and faculty can help with the process. There is evidence that a well-planned portfolio-assessment program can be conducted on a large scale. As with interviews, it is critical to have clear, well-understood admissions goals and a way to organize the information from the portfolios to achieve acceptable levels of reliability of results.

One additional caveat on portfolios: One research study conducted in Vermont showed middle-class students benefited most from portfolio assessments.

Questions Board Members Can Ask About the Use of Test Scores

By finding the answers to these questions, you may be able to determine whether your institution uses tests in ways that may be unfair to minorities, women, and students from lower income families.

1. How does your institution use the SAT and/or ACT? Does it use cut-off scores contrary to College Board and ACT guidelines? If so, do such scores apply to general admissions or to particular programs? Does your school use a statistical formula that includes SAT/ACT scores to judge applicants' academic records?



2. Has your institution's admissions office conducted a recent study of test-score validity in predicting academic grades? Was the study conducted using the test maker's research design, or was it done by independent and impartial researchers? Did the study compare test scores only to first-year grades or to four-year college grades or graduation rates? Did the study examine the academic records of racial, gender, income, and geographic subgroups separately? Was the effect of coaching taken into account when considering SAT or ACT scores?

3. How does your college report SAT and ACT scores in handbooks and brochures? Does it report simple averages or a range of scores? Does it include *all* entering students' scores in these figures, in compliance with the Good Practice Principles of the National Association of College Admission Counselors (NACAC)?

4. Are standardized test scores alone used to determine who receives a scholarship award? Are cut-off scores used to make "first round" eliminations or otherwise to determine eligibility for an award?

5. What is the gender and racial breakdown of test-score-based scholarship winners? How many become semifinalists and finalists? Are qualified minority and female students losing out just because of their test scores?

—Compiled by the National Center
for Fair & Open Testing, Cambridge, Mass.

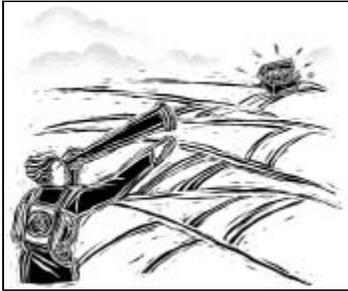
Excerpts from the College Board's "Guidelines on the Uses of College Board Test Scores and Related Data"

Schools, colleges, universities, scholarship agencies, and other organizations that use College Board test scores and related information should:

- Assign responsibilities involving test use to people knowledgeable about educational measurement, including the purposes, content, statistical characteristics, capabilities, and limitations of any test in use or under consideration.
- Provide those who may have occasion to take tests with full information about them, including why they are required, when they are offered, and how the information they yield will be used.
- Use College Board test scores and related data with discretion and only for purposes that are appropriate and in ways that have been validated.

When College Board tests are used for admissions purposes, the responsible officials and selection committee members should:

- Know enough about tests and test data to ensure that their proper uses and limitations are understood and applied.



- Use test scores and related data from the College Board's Admissions Testing Program in conjunction with other indicators, such as the secondary school record, in predicting the applicant's chances for success at a particular institution.

- Take into appropriate consideration predictions of performance for applicant subgroups—men and women, ethnic groups, international students, adults, and those interested in different academic programs—in developing equitable admissions policies and practices.

- Guard against using minimum test scores unless used in conjunction with secondary school performance and unless properly validated.
- Ensure that small differences in test scores are not the basis for rejecting an otherwise qualified applicant.
- Refrain from offering admission to prospective students solely on the basis of test scores before they have applied.
- View admissions test scores as contemporary and approximate indicators, rather than as fixed and exact measures of a student's readiness for college-level work.

Adhering to the foregoing guidelines will help ensure that test scores and related data are used appropriately from an ethical and educational standpoint. Because the decisions and judgments influenced by test scores may have significant personal and social consequences, care should be exercised to avoid practices that might limit educational opportunities for all students. When [these] guidelines are properly followed, the result of using test scores should be decisions that are better in significant respects than they would have been without the influence of the scores.... The following are examples of test uses that should be avoided:

- Using the SAT or other College Board tests as measures of the overall performance of students, teachers, educational institutions, districts, states, and other groups.
- Using test scores as the sole basis for important decisions affecting the lives of individuals, when other information of equal or greater relevance and the resources for using such information are available.
- Making decisions about otherwise qualified students based only on small differences in test scores.
- Providing inadequate or misleading information about the importance of test scores in making judgments or decisions.

- Requiring or recommending that certain tests be taken, when in reality the scores are not used or are used to a negligible extent.
- Discouraging certain students from taking the SAT or other tests in an effort to increase a school's or district's average score.

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Noncognitive Variables

Admissions officials continually are looking for appropriate ways to assess individuals with unconventional or nontraditional backgrounds and experiences. The use of "noncognitive variables" may be helpful.

North Carolina State University now includes in its undergraduate application package a supplementary admissions application it hopes to use to assess these factors. This supplementary application is evaluated along with high school grades and standardized test scores. For the class entering in 1998, the university provided more than 70,000 of these supplementary forms, and virtually all applicants have returned the form with their regular application. This project bears watching.

In addition, Louisiana State University Medical School in New Orleans has conducted training sessions using case studies and simulated admissions exercises for its admissions committee on the use of noncognitive variables. In the ten years the university has conducted the training, the admission, retention, and graduation rates for minority students have increased. Minority student enrollment has doubled to 21 percent with an 87 percent retention rate. Further, more than 80 percent of the admissions committee members said they believed using noncognitive variables in admissions was worthwhile, and 90 percent found the training process helpful.

In research I have conducted, one system of measuring noncognitive variables—the Noncognitive Questionnaire—has been shown to work well in assessing creative and practical abilities of many different types of students in undergraduate and postgraduate programs. That is, correlations with college grades and retention were significantly higher when noncognitive variables were used in conjunction with standardized test scores and earlier grades. This questionnaire measures the following characteristics of applicants:

- **Positive Self-Concept or Confidence.** Can demonstrate strength of character, determination, independence.
- **Realistic Self-Appraisal.** Recognizes and accepts any academic deficiencies and works hard at self-development. Recognizes the need to broaden his or her individuality.
- **Able to Negotiate System.** Interprets the system and makes it work to his or her benefit. Employs varying strategies depending on the situation.
- **Prefers Long-Range Goals to Short-Term or Immediate Needs.** Able to respond to the need for deferred gratification.

**The challenge is to find appropriate ways to
assess individuals with unconventional
or nontraditional backgrounds
and experiences.**

- **An Availability of Strong Support Person.** Has had a capable mentor or other individual to turn to in crisis.
- **Successful Leadership Experience.** Demonstrates leadership in any area pertinent to his or her background (church, sports, or other groups).
- **Demonstrated Community Service.** Strong involvement in his or her community.
- **Acquired Knowledge.** Unusual and/or culturally related ways of obtaining information and demonstrating knowledge. The field itself may be nontraditional.

Three primary groups may benefit from the use of such additional measures. The first group consists of applicants "on the bubble." These applicants' grade-point averages or test scores fall just short of the minimum acceptance level of the institution. These applicants may or may not be racial or ethnic minorities, and perhaps the institution would like to admit more of these individuals than the traditional admissions criteria and procedures allow. Rather than risking the perception of "lowering standards" and admitting an arbitrary subset of these applicants, admissions committees can use the foregoing criteria to identify applicants that have the best chance of succeeding at their institution.

Applicants whose traditional scores or rankings fall considerably below typical acceptance standards represent the second group that can benefit from additional assessments. These applicants probably will need help to succeed with college-level work, but many institutions have support programs specifically designed to provide such help. The question is: Which students, if admitted, are most likely to benefit from assistance programs? Information from interviews, portfolios, and/or noncognitive variables can help answer this question. As with borderline applicants, admissions officials can use various measures to predict which otherwise unacceptable applicants have the best chance of succeeding in college. These students can be selected and routed into the special-help programs they need.

Institutions interested in student retention should not overlook a third group that can benefit from supplementary assessment: students with high traditional scores or rankings who may want to leave college without graduating. Admissions officials can assess all such students who have had high scores on traditional measures and use the results of the additional assessment for advising and counseling purposes. Some of these students may want to leave because of problems foreshadowed by low scores on tests of specific creative or practical abilities. When such patterns are noted early, these qualified but "at risk" applicants can be steered toward retention programs that help students build such nonacademic skills as goal setting and stress management. These skills can be as much help to certain students as remedial math is to others.



To summarize, here's what some encouraging research shows about the characteristics and uses of measures of creative and practical abilities.

- They can predict retention and graduation better than other measures for all students.

Case Study:

Muhlenberg College Makes the SAT and ACT Optional

The faculty and board of trustees of Muhlenberg College, an 1,800-student liberal arts college in Allentown, Pa., voted to make the SAT and ACT an optional part of the admissions policy.

Students choosing not to submit the SAT or ACT are asked instead to provide a graded paper with the teacher's grade and comments on it. They also are required to interview with a member of the admissions staff on campus or at a special location—or in special cases, by telephone.

All students who can provide standardized test scores are asked to do so after the admissions decision has been made so the college can facilitate advising, placement, and ongoing assessment of this policy.

Students wishing to be considered for non-need merit awards and/or honors programs at Muhlenberg are required to submit SAT or ACT scores.

All applicants—both those who choose to submit standardized test scores and those who do not—will be evaluated primarily on the basis of high school record (with particular emphasis on junior and senior schedule and performance), extracurricular contributions to school and community (with particular emphasis on leadership and community service), an application essay, teacher and counselor recommendations, and demonstrated interest in Muhlenberg College (a campus interview or visit).

The Muhlenberg version of the Common Application will have a return postcard students can use to indicate whether they wish their scores to be used in the admissions evaluation. In the case of students who use other versions of the Common Application, Muhlenberg will send the postcard, which can be completed and returned to indicate the student's preference regarding the use of standardized test scores.

Questions and Answers About Muhlenberg's Test-Optional Policy

Why make the SAT or ACT optional? This decision was the result of two years of thought, research, and debate. We were concerned that standardized tests were overemphasized at a crucial stage in the college admissions process, both by students, who often imagine the SAT carries greater weight than it really does, and by colleges, which may be forced to become more SAT-driven in admissions decisions to protect profiles and rankings. We also wanted to encourage groups of students who are underrepresented on many selective college campuses who often do not score well on the SAT (non-English-speaking students, low-income students, first-generation college students, students of color, and some learning-disabled students, for example).

Does this imply a lowering of Muhlenberg's standards? No. In fact, the decision was finalized during the 1995-96 admissions year, during which the college received a record number of early decision and overall applications and enrolled its largest freshman class in history. A number of selective colleges including Bates, Bowdoin, Lafayette, Connecticut, and Dickinson have optional-testing admissions policies. Bates and Bowdoin have reported more interesting and diverse applicant pools after making standardized tests optional.

What about the predictive power of the SAT? The College Board's own data indicate that the high school record remains the single best predictor of academic success in college. However, studies also indicate that certain groups of students score less well as a group

than other groups of students. In this respect, the negative or exclusionary impact of the SAT falls most heavily on minority and low-income groups of students because they tend to score lower on the test.

Interestingly, women also score on average 45 points lower on the test than men, despite the fact that women as a group outperform men in the classroom at the secondary school and collegiate level. Finally, recent studies have shown that performance on standardized tests is a skill that can be developed with practice and coaching. This fact certainly removes an element of "standardization" and gives further advantage to those who are affluent enough to afford coaching.

Does this mean that strong SAT or ACT scores no longer help a student in the admissions process at Muhlenberg? Not at all. In fact, students wishing to be considered for non-need based scholarships must continue to submit SAT or ACT scores. In addition, test scores for students who choose to submit scores will continue to factor into admissions decisions. The optional-testing policy simply provides students with some degree of choice about how to represent themselves in our admissions process and affords talented students who may not score well on the SAT another avenue by which to pursue admission.

A final thought. We hope the test-optional admissions policy will give some power back to students in the admissions process and give them a larger say in how to present their strongest portfolio of credentials.

—Courtesy of Muhlenberg College

Research on and experience with new measures of creative and practical abilities is very promising, but more of both are needed.

- They can predict grades better beyond the first year of college than other measures for all students.
- They can predict grades better than other measures in all years for nontraditional students.

- They can measure attributes that are particularly relevant beyond the first year that standardized tests do not measure.

Research on and experience with new measures of creative and practical abilities is very promising, but more of both are needed. The continuing debate about admissions standards hopefully will encourage greater investment in such research and more creative approaches in selecting students.

A Word of Encouragement

Many more colleges and universities can achieve their admissions goals by adding supplementary assessments to the information they require of applicants. Implemented properly, an admissions system that combines standardized tests, previous grades, interviews, portfolio assessments, and/or noncognitive variables can ensure fairness, increase retention for all students, and admit a more diverse group of students without relying directly on race or minority-group status. This proposition holds both at the undergraduate and graduate levels.

Furthermore, by assessing applicants on a broader range of abilities or types of intelligence, colleges and universities will be using all the information available on applicants and consequently will be able to select students who can take full advantage of what their institution has to offer.

Such an assessment program may not, of course, be worthwhile for all colleges and universities. Its applicability depends on the institution's mission and purposes, its values, and its admissions goals that help to define the nature of its student body. Such distinctions among institutions, however, should not necessarily be based on selectivity or between elite and open-admission institutions. Even the most selective institution can strengthen its admissions process, policies, and practices along the lines suggested here. The sidebar page 3 suggests a starting point for trustees and chief executives who wish to explore new possibilities in admissions policies and practices with faculty and staff.

College and university admissions, like all other endeavors in the academy, is subject to change. As new research is conducted and institutions share their experiences, admissions policies will need to be reexamined more often than they were in the past. This should be a continuing process, one that governing boards are in a unique position to facilitate to the benefit of their institution and all of higher education.



There never has been a more appropriate time to experiment, to explore new and creative ideas in the pursuit of enrollment and admissions goals—especially those that avoid the use of race, ethnicity, and the rhetoric of affirmative action. Governing boards can make a difference in helping academic leaders to escape the status quo. All that is required is information, a plan, an appropriate financial investment, determination, persistence, and patience.

Case Study:

Texas Mandates New Admissions Criteria for Public Universities

In the wake of the Hopwood decision, which prohibits universities in Texas from considering race as an admissions criterion, Texas legislators sought ways to increase the enrollment of minority students without using racial preferences in admissions. A new law stipulates admissions guidelines for students applying to state institutions in fall 1998. The policy has three components:

1. Public universities must admit all students from Texas high schools who graduate in the top 10 percent of their class.
2. Public universities may extend automatic admission to students who graduate in the top 25 percent of their class.
3. Public universities shall evaluate applicants for the remaining slots using criteria spelled out by the legislature.

Admissions officials may use all or some of the following factors: academic record;

socioeconomic background; the academic-performance level of the applicant's school; responsibilities while attending school, such as a job or helping to raise children; where in Texas the applicant is from; performance on standardized tests, individually and compared with other students of similar socioeconomic backgrounds; involvement in community and extracurricular activities; commitment to a particular field of study; personal interview; whether the applicant attended a school that was under a court-ordered desegregation plan; lives in a rural, suburban, or urban area; would be a "first generation" college student; is bilingual; comes from a poor school district; has been admitted to a comparable out-of-state institution; or any other factors that an institution considers related to its mission.

Beginning next fall, the University of Texas law school will consider a broader set of criteria and pursue a broader set of goals in assessing applicants for admission. Under the new policy, the law school will continue to review each application and assess candidates' academic qualifications. That assessment will include the candidate's performance on the Law School Admissions Test (LSAT) and the undergraduate grade-point average (GPA), as well as nonquantitative indicators of academic promise revealed by a review of the full file. But the new policy adds several goals in addition to the identification of academic promise.

Among academically promising candidates, the law school will consider, for example, candidates' demonstrated commitment to public service, leadership, or other qualities valuable to the legal profession. It also may consider additional qualities that are valuable in the law school classroom and community, such as distinct experiences that are not otherwise well represented in the student body.

Finally, the admissions process will seek to identify academically qualified candidates from underserved regions of the state and socioeconomically disadvantaged backgrounds. Applicants also may write an essay about personal challenges or disadvantages they have faced. Personal interviews also will be offered to many of these individuals.

The law school will use no specific formula or weighting criteria in evaluating files; each applicant's file will be judged as a whole in comparison with the files of other applicants. Faculty will read and assess individual files of candidates who, on the basis of the above criteria, present a close case for admission. Previously, the admissions process had been highly centralized and conducted primarily by admissions staff.

Recommended Readings

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Coaching and Computers: Two Issues That Affect Standardized Testing

Test Preparation Programs. Several research efforts have proved that experience in taking standardized tests can increase the scores of certain individuals. Formal test-preparation programs can make a difference of as much as 100 points in the SAT scores of many candidates, but it is unclear whether this is true simply because students who enroll in such programs are highly motivated and benefit from the time they spend being coached. Highly motivated students who use one of numerous self-help books may do as well as those attending formal programs.

Some groups of students may not demonstrate their true abilities on standardized tests as well as students from other groups, and a test-preparation program can help them. However, the test-preparation techniques certain nontraditional or disabled students may need could be quite different from what a traditional student needs. Additionally, some of these nontraditional students may show their aptitudes and abilities in ways standardized tests do not reflect.

The conclusion regarding test preparation is that most students benefit from systematic practice in taking standardized tests, whether through individual or formal efforts. However, traditional and nontraditional students may need to emphasize different preparation techniques.

A bottom-line question for admissions officials: Is an SAT score of 1200 from a student who attended an inner city public school really "lower" than a score of 1400 from a student who attended a suburban private school and took an SAT coaching course?

Computerized Testing. Administering tests by computer already exists and soon is likely to become the norm for many standardized tests, although probably not in the near future for the SAT or ACT. The initial administrations have been with graduate-level exams.

While computerized testing provides great opportunities for flexibility and decentralization, it also poses challenges to the testing industry, applicants, and admissions offices. Little reliable information currently is available on the unique problems various individuals may have in interacting with a computer as they are being tested. Skills in working with a keyboard or other input devices, reading a video display, and other issues concerning the conditions of the testing environment still are being studied.

What's more, computerized testing got off to a bad start in December 1997 when a network problem forced postponement of the Graduate Management Admission Test for 1,300 would-be test takers.

The biggest issue facing the testing industry is how to generate new test items or formats and assess their validity when the demand for on-line testing is high and decentralized. Previously, when a test was administered four or six times a year, new questions could be tried out in some or all versions and compared with existing questions. However, it would appear to be impossible to develop enough new questions to keep up with the nearly unlimited opportunities to take an exam on-line. Confidentiality of test questions also is a large concern.

Whether computerized testing is fair to all groups of students is an issue that bears watching. Students from wealthy families, of course, are more likely to have better access to and experience with computers than other students.

—W.E.S.