Memo to: President Reynolds

ean Straub

Dean Carignan

Dean Branham

Dean Hiss

Dean Mitchell

Admissions Committee:

Professor Lee

Professor Clough

Professor Bradley

Professor Grafflin

From: Dean Woodcock

Date: August 20, 1984

Topic: Informational Report on Optional SAT's

Attached is the final draft of the informational report on optional SAT's. You will note that there are four appendices attached, one of which is a list of materials to be placed on reserve in the Ladd Library. If any of you have suggestions for additional materials — or if any of you would like to review any materials you have not already seen — please give me a call. I imagine the list of materials left on reserve will change (grow) in the next two weeks, so I would envision distributing a more complete list at the Faculty Meeting on September 10 or through campus mail.

OPTIONAL SAT'S: AN INFORMATIONAL REPORT

Last April, the Committee on Admissions and Financial Aid recommended to the Faculty that SAT's be made optional for admission to Bates College. The Committee cited three main reasons in recommending this change of policy.

First, research on the predictive value of SAT's in relation to other criteria has provided evidence that their value as predictors is largely covered by the Achievement Tests required by the College. Therefore, admissions decisions of at least equal validity can be made without the SAT's.

Second, the predicted decline in the high school population over the next two decades may make it more difficult for Bates College to attract a talented applicant pool. The SAT's work to Bates's detriment in the effort to attract a large and academically strong applicant pool.

Finally, there are ethical issues involved in the use of SAT's for admissions to Bates. These issues fall into three main categories: the relationship of SAT's and family income; the increased incidence of SAT preparation courses; and the effect of the tests on the high school curriculum.

Each of these issues is discussed more thoroughly in sections I through INI. Section IV is a summary of the major conclusions of the report. The Appendix contains four sections: an annotated bibliography; an explanation of the mechanics of implementing the policy; and, finally, a list of materials placed on reserve in the Ladd Library for those who would like to review the research and literature.

I. The Predictive Value of the SAT's:

Almost all research on the predictive validity of SAT's emphasizes the tremendous complexity and interrelationship of the academic criteria. No single criterion is by itself a perfect predictor. None of the statistics is infallible. Regression equations cannot replace the careful, thorough evaluation of applications.

Research on the validity of SAT's in relation to college performance abounds. We have added an annotated bibliography to this report (see Appendix I) to highlight some of the research and to outline the various conclusions. The bibliography is by no means complete, but represents some of the background reading used in reaching the conclusion that SAT's can be made optional at Bates College.

There are two fundamental aspects of the question about the predictive value of the SAT's. The first is the value of the tests

as predictors themselves (discussed in Part A). The second is the predictive value of the tests in relation to other academic credentials (discussed in Part B).

- A.) The SAT's as Predictors by Themselves:
- 1.) Historical Background and Research:

The Scholastic Aptitude Tests, when first generally accepted by college admissions officers, were viewed as a way of comparing the high school records of students from different schools or regions in the country. The tests were also endorsed as a way of opening the doors to prestigious academic institutions that had previously discriminated against ethnic and religious minorities. The SAT's were an equalizing force in the admissions process: a Californian could be compared with a student from Maine; a minority student with high scores could not be refused admission.

At first, SAT scores were not reviewed as the only standardized test critical to assessing an individual, or describing a class. In 1960, the Bates College Class Profile provided freshman average scores for the Otis Test of Mental Ability (the I.Q. test). But gradually, SAT's assumed greater and greater importance in evaluating an applicant, in describing a freshman class, or in assessing the quality of a college.

Efforts were made to assess the validity of the SAT's in predicting college performance in the 1960's, but interest in the tests mounted as the national averages began to decline. At first attributed to greater numbers of disadvantaged students taking the tests, the decline was exposed as a real decline, not limited to one economic or ethnic group. Although the tocsin has been sounded in American education, there is still disagreement as to whether the scores are valuable in assessing the state of education or the ability of an individual.

One of the problems in reading the literature on testing is that institutions (or test groups) are rarely "like Bates." Small, highly selective, liberal arts colleges have not had the time or resources to assess critically the scores and their relationship to college performance. While Bates College has, in recent years, begun this kind of research, it is helpful to compare notes with a comparable institution. It is important to ask questions about the value of the SAT's in relation to college performance, as well as to pose questions about the possible risks in rising attrition were the test scores made optional.

Because Bowdoin College made SAT's optional 15 years ago, their research on this issue is of particular interest. In an article accepted by the <u>Journal of Higher Education</u> (Paul E. Schaffner, "Competitive Admission Practices When the SAT is Optional"), students who submitted their test scores for purposes of admission were compared to those who did not. Since Bowdoin now requires students to submit the tests for matriculation, Professor Schaffner was able to compare the test scores and college performance of

the two groups of students.

The Bowdoin study indicates that there is a 70-point difference in test scores between those who submit their SAT's for purposes of admission and those who do not. Submitters, understandably, have the higher scores. Because non-submitters are more likely to enroll if accepted, about one-third of the Bowdoin student body is comprised of non-submitters. According to Professor Schaffner, students decide to submit or withhold their scores primarily on the grounds that either option will improve the chances of admission.

When Professor Schaffner studied the academic performance of both groups, he found only modest differences. Submitters and non-submitters had closely parallel college GPA's. The average grade point average of non-submitters was about 2.8; for those who submitted their test scores it was a 3.0. Six percent of the withholders had grade points of below 2.0, compared with three percent of the submitters. Ten percent of withholders had GPA's above 3.5, while 15% of the submitters had grade points above 3.5. About a third of each of Bowdoin's classes of 375 have not submitted their scores. While submitters are clearly in the majority of 3.5 or better students, about the same number of submitters and non-submitters are on academic probation (or worse).

2.) Bates College Research:

Bates College's research has shown that the SAT's do have some predictive value, but that the value is almost exactly parallel with the value of Achievement Tests. A number of studies have been undertaken to determine the relative value of the tests. The first study was completed five years ago, when Professor Geoffrey Law's committee on freshman writing skills compared actual writing samples with standardized test scores. This committee discovered that the highest correlation with actual writing skills was the English Composition Achievement Test. Subsequent studies have borne out this conclusion.

In the summer of 1980, the Bates Admissions Office began an assessment of the quantitative credentials with which a student enters Bates and the relationship to grade point average. The first effort was performed on the records of 372 students. The results showed that SAT's have significant correlations* with grade point average (verbal SAT: .263, math SAT: .380). Subsequent studies (one which was published by the National Association of College Admissions Counselors in April, 1984) have upheld the results. The SAT's do have some predictive validity at Bates, but are neither exact nor the only measure of potential to perform academically.

^{*}Definitions for statistical terms are provided in Appendix II.

These results do not differ from the statements made by the Educational Testing Service and the College Board concerning the SAT's. The tests are accurate within a range, as the pamphlet "Your Score Report for the SAT and Achievement Tests," published by the College Board, explains:

When you consider your scores, keep in mind that no test can measure anyone's abilities with perfect accuracy. . . If you were to take a test an infinite number of times, your scores would tend to cluster around an average value. Testing specialists call this average your 'true score'. . . To measure the extent to which students' obtained scores vary from their true scores, an index called the standard error of measurement (SEM) is used. . . About two-thirds of those taking the tests score within thirty points (or one SEM) of their true score. If your true score is 430, for example, the chances are about two out of three that you will score between 400 and 460 (430 plus or minus 30). . .

It is therefore difficult to demonstrate individual differences between two students with scores of 570 and 630. But students, parents, and counselors attach great importance to differences of that magnitude.

ETS would find it hard to prove strong correlations between SAT's and college performance. College admissions committees do not use the test scores as their only standard for decision making. High school grades and rigor of courses, Achievement Tests, essays, and recommendations influence the decisions of the committee and put the SAT scores of prospective students in broader context.

B.) The SAT's as predictors in relationship to other criteria:

When the SAT's are viewed in relation to other pieces of information, the picture changes. Few articles have been written about the value of SAT's in relation to other statistical information, and the Bowdoin study did not discuss the value of Achievement Tests, possibly because Bowdoin made Achievement Tests as well as SAT's optional for admission in 1969. In discussing the predictive value of SAT's, the research done at Bates College is particularly useful.

Although the Law study had already raised questions on the relative value of SAT's, additional studies probed even further as to predictive validity. We have undertaken four studies to test the relative values of the SAT's, Achievement Tests, and class rank in prediction of grade point average. The 1980 study

involving 372 randomly selected students concluded that while SAT's did have predictive value, they were less strong in relation to other criteria involved in the admissions decision. These results have been tested on three separate occasions: on a random sample of 355 students during the summer of 1983, on a more specific group of 303 students (which included all academic attrition cases during the 1983-84 school year), and on the Class of 1987. Each of these studies is described and a summary chart follows.

The research completed during the summer of 1983 laid the groundwork for the work published in the Journal of College Admissions in April, 1984. (Those who have read the article will notice differences in correlations because the article was based on the 204 students who returned the questionnaires). One major conclusion from both evaluations was that the English Composition Achievement Test could replace the verbal SAT without damaging the regression equation. The average of the remaining Achievement Tests, combined with the English Composition Test, could replace both SAT scores. High school class rank continued to be valuable in the regression formula.

The summer of 1984 produced two separate studies. The first compared academic attrition cases to a random sample of Bates students. Because there was an unrepresentative number of poor students in the group of 303 (which included the 30 academic attrition cases), a second analysis was performed of the 273 students who had not been academically dismissed. As one would expect, the correlations declined. We then studied the academic attrition cases and compared them to the remaining 273 students, but discovered that there were no significant differences between the two groups except for mean scores on the highest Achievement Academic attrition cases had lower test scores, class rank, and academic ratings (a rating assigned by the Admissions Committee at the time of admission, commonly used to identify "risk" students), but the differences were not significant. Students who excelled at Bates (for this study, the cut-off was a 3.4 or better) were significantly stronger high school students. While they were stronger on the SAT's, they also had significantly better scores on Achievement Tests, higher high school class rank, and a better academic rating from the Admissions Committee.

The second study reviewed the performance of the freshman class of 414 students (a total which included January enrollees). In this case, we separated the Math Level I and II Achievement Tests to determine their relative value in a regression equation. The correlation for the 303 freshmen who took the Math I Achievement (.230) was almost exactly that of the Math SAT (.241), the Math II Achievement, taken by 61 students, was even stronger (.546). For the 81 students who took neither the Math I nor the Math II Achievement Test, the mean math SAT score was a 565, and the median score was a 560.

Review of Bates College Research: 1980-1984

Decimals Listed Below are Correlations with Grade Point Average

		1984	1983	1980	Year of Study
414 (4)	273 (3)	303 (2)	355	372 (1)	# of Students
.203	.158	. 195	.270	.263	Verbal SAT
.241	. 235	.307	. 226	.380	Math SAT
• 3555	. 352	. 233	. 283	. 568	Average of Achievement Tests
.147	. 233	. 228	. 245		English Composition (With Essay)
. 226	.266	.319	. 388	1	English Composition (Without Essay)
• 333	. 473	, 488	.310	. 425	High School Class Rank

Notes: 1.) The 1980 study, which used a random sample of all students only attempts to predict the first-semester freshman grade point average. The English Composition Achievement Test was included in the average of Achievements. Subsequent studies have separated the English Composition Achievement Test.

- not graduate for academic reasons. academic year 1983-84. In the group of attrition cases, we included students who did 2.) The 1984 study of 303 students included the 30 attrition cases for the
- The 1984 study of 273 students removes the academic attrition cases
- 4.) The study of the Class of 1987 uses the cumulative grade point average. For most students (January matriculants excluded) this cumulative grade point is the result of two semesters at Bates.

Why would Achievement Tests emerge as stronger predictors than the SAT's? First, Achievement Tests are taken in a variety of areas and can cover a broader range of knowledge. Secondly, all students take the English Composition Achievement which, in each of the studies, has been strongly correlated with the verbal SAT. In the study of the Class of 1987, the strong correlation of the Math I Achievement with the math SAT indicated that the information in the math SAT was also being covered. (Of the 2262 freshmen applicants who had taken Achievement tests and applied for the Class of 1988, only 210 had not taken either the Math I or Math II Achievement Test. Of this 210, only 101 had not taken at least one science Achievement.) It is also possible that students take Achievement Tests in areas of demonstrated ability, and select majors with that in mind.

Although there are variations in the predictive value of any one of these criteria, one result has been consistent throughout our research: the predictive value of the SAT's is virtually "covered" by the Achievement Tests.

- II.) Optional SAT's: The Effect on the Bates College
 Applicant Pool:
 - A.) Declining High School Enrollments and Related Issues:

During the next decade, colleges in the United States, and particularly New England, will face some major challenges. Declining enrollments in high schools, particularly in the Northeast, combined with rising tuition costs promise to make the next decade an uncertain one from the admissions standpoint. A brief description of the changes in demographics may help highlight some of the problems which are now (and will continue to be) factors in the recruitment of an entering class.

The number of high school seniors in Massachusetts, Connecticut, New York, and New Jersey will decline by 37% by the turn of the century. These are states from which Bates College traditionally draws students. While declines in the west, south, and southwest are less dramatic, the competition for highly qualified students from these regions has intensified and will continue to do so.

During the past ten years, tuition at Bates has doubled, while federal aid to private education has been reduced. Parents and students are understandably concerned with the value of a liberal arts education in relation to its cost. Changes in the intended majors of American high school juniors reflect concern over the value of a liberal arts education with regard to employment opportunities. Over the last eight years, the percentage of students intending to major in business has grown from 11.5% to 19.7%, according to College Board information. Interest in engineering has climbed from 5.9% to 11.3%, while computer science has grown from 1.2% to 8.2%.

Much is heard of the test score decline and of the recent small increase in average scores nationally. The last decade has brought not only reduction in average scores, but a decline, in real numbers, of students who test well on the SAT's. Fred Hargadon, the former Dean of Admissions at Stanford, noted a year ago that while the numbers of students had declined by only 3% from 1972 to 1982, the number scoring 650 or better on the verbal SAT had dropped by 45% (from 53,794 in 1972 to 29,236 in 1982). The number of students scoring 650 or better on the math SAT had dropped by 23% (from 93,868 in 1972 to 71,916 in 1982).

Nationally, fewer than 4,000 high school seniors have 600 or better on both the verbal and math SAT's, rank in the top 10% of their class, and can contribute \$5,000 toward their first year in college. In New England, approximately 400 students meet that set of criteria. The College Board sends Bates reports on its prospective students each year. In its most recent report, less than 20% of our applicants--regardless of their scores--can contribute \$10,000 toward the first year of their college education.

Changes in the efforts to recruit students and in the public image of Bates have offset some of these problems. Recruiting outside the Northeast is having some success. For the Class of 1988, California, Colorado, and Minnesota are all in the "top ten" states in numbers of entering students, and a third of the Class lives outside New England. The teaching and scholarship of the faculty and the achievements of our alumni do much to build our reputation. Additions to and improvements in College facilities (the Ladd Library, the new athletic facility, the renovation of Hathorn Hall) create positive impressions on visitors and draw favorable attention to Bates. In fact, once students visit the campus, they are very likely to apply. Better than 60% of those students who interview at Bates decide to apply and, if accepted, 43% decide to enroll. Clearly the College, once seen by a prospective student, emerges as a very strong institution.

B.) The Use of College Guidebooks in the College Selection Process:

But it is still difficult to reach out to those who have not visited and encourage them to do so. Last year, more than 25,000 students wrote to Bates asking for information, but only 2,550 applied. There are, of course, many reasons for this. The location in Maine, viewed by some prospective students as an advantage, seems a real drawback to others. The concerns about tuition and financial aid discourage many. Certainly some students, intent on a more specialized education, decide not to visit Bates.

Still other students decide not to visit Bates because the median SAT scores published in guidebooks to colleges are either too high or too low. In drawing up the list of colleges to visit, a student uses the median scores as a shorthand description of the quality of a college and his or her chances of admission.

These median scores have had the effect of compressing the applicant pool toward the middle. Students whose test scores vary by 60 points from Bates College's medians select themselves out of our applicant pool, either because the College is too much of a "long shot," or because it becomes a "backup." To illustrate this point, the ranges of test scores for the applicant, accepted student, and enrolling student categories for the freshman Class of 1988 may be helpful, and are provided on a chart which follows.

Class of 1988: Test Scores for the Applicant "Pool"

Verbal SAT	Applied	Accepted	Enrolled
700-800 650-690 600-640 550-590 500-540 450-490 Below 450	55 165 365 537 573 423 293	53 135 250 349 276 125 53	14 27 86 120 111 49
Math SAT			
700-800 650-690 600-640 550-590 500-540 450-490 Below 450	179 395 514 510 433 238 146	145 267 324 266 160 55 20	34 80 111 100 64 24

(The total number of applicants and accepted students do not include some international students, who took the Test of English as a foreign language, and some midwesterners, who took the ACT's.)

The published test averages do tend to be a self-fulfilling prophecy. Students with lower than "profile" scores, many of whom the College might like very much to have apply and enroll, are dissuaded from applying. Minority students, first generation college students, economically disadvantaged students, or students with talents not measured by standardized tests do not apply in the numbers we would like. By the same token, students with high test scores seem to view Bates as a backup school. Making SAT's optional would encourage students to look more carefully at the education offered at Bates.

Perhaps paradoxically, while the SAT medians in guidebooks exercise control over who decides to look seriously at Bates, they have little influence on the "rating" systems the guidebooks employ. "Highly selective" schools are designated as such by the

number of applicants and the number admitted. Colleges which go over the 50% mark in admitting students risk losing their "highly selective" rating, regardless of the quality of education offered at the school.

C.) Optional SAT's: The Bowdoin Experience:

The Bowdoin study is again useful in determining the potential results on our own applicant pool. In 1968, Bowdoin had 1800 applications. The faculty voted to make SAT's optional in 1969 and by 1974, applications had risen to nearly 4,000. Bowdoin had made other changes concurrently: the grading system changed, co-education was introduced, the calendar was altered. according to Professor Schaffner, these changes did not cause the dramatic growth in applications. The number of applicants who submitted their scores stayed between 1,800 and 2,000, while the non-submitting applications grew from 0 to 2,200 by 1975. The growth, to quote from the report, was "solely due to a steady increase in the numbers and proportions of applications withholding SAT's." The admissions committee became concerned when the number of non-submitters reached 55% of the pool in 1975, and changed the wording in the viewbook to "recommend submission." change, in the words of the report, had an "immediate, substantial, and lasting effect." Submitters went up by 1,000, but the withholders went down by 1,600. The Bowdoin applicant pool has dropped since to about 3,000.

Professor Schaffner's results were summarized as three main conclusions: the optional SAT policy expanded the applicant pool, but did not simply replace high scoring students with low testers; the policy was overwhelmingly endorsed by currently enrolled students; and both submitters and non-submitters have successfully handled the academic requirements of the College. He remarked, "Of the dozen students permanently dismissed for academic or disciplinary reasons since fall 1979, only two had withheld SAT scores upon application."

D.) Possible Effects on Bates College's Applicant Pool:

In an attempt to determine what effect the change in policy might have on our own applicant pool, we undertook two studies. The first was to send questionnaires to 95 guidance counselors to poll them on the issue. The second was a questionnaire sent to students making good impressions on the admissions staff during the interview, but who did not apply to Bates.

We sent the counselor questionnaire to schools from which Bates traditionally draws students, as well as to schools from which we would like to have more students. It had been returned by 46 counselors by mid-August. Asked if the College's reputation would change if this step were taken, 37 thought it would not, largely because the academic reputation of Bates is already strong.

Six thought the reputation would improve, 3 were unsure of the effect on the reputation of the College. Those who thought the reputation would improve wrote comments like: "Bates would seem innovative", the College would be seen as "forward thinking", people would "admire your sense of confidence." The remaining three counselors were unsure of the possible effects, one thought the reputation would probably improve, the other two acknowledged that some people might think Bates was having trouble getting applicants. Other responses included references to Bowdoin and to Harvard which is currently working on a similar proposal.

The comments on these questionnaires bear some description. Most counselors have real reservations about the tests, citing the SAT preparation courses frequently in their concerns. There is repeated frustration that the median scores are dictating the decisions of the students. One counselor recently explained, "I see them (the students) using guidebooks and doing it, right here in my office, all the time. If they are below the mean (SAT), they say, 'Well, I won't apply there,' and if above, 'Well, it's too easy for me.'" Another counselor agreed, writing that, "Some students use them (the scores) as Gospel." Yet another added, "You would attract more kids at the top end of the scale. They are the ones I see screening the schools out on scores. Making SAT's optional would not muddy the waters—kids know Bates's reputation. Bates has a school philosophy that will support this move: 'Fairness and hard work.' I think it would be a great move."

The questionnaire sent to non-applicants produced similar results. Out of 580 sent, 199 questionnaires were returned. Twenty-five students responded they would have been more likely to apply if SAT's were optional, 11 thought they would have been less likely to apply, and 156 felt it would have made no difference in their decision. It is important to note that the majority of the students who interview and decide not to apply are Early Decision admittees at another of the NESCAC schools.

It can be concluded that to make SAT's optional for admission would not hurt the academic reputation of the College and could result in increased numbers of applications.

III.) Ethical Issues Connected with the SAT's:

The Committee on Admissions and Financial Aid raises for discussion the current requirements for SAT's in light of the College's traditional stands on equal opportunities for education and fairness. There are three closely related issues involved: the relationship of SAT scores and family income, the increasing incidence of "coaching" courses for the SAT's, and the effect of SAT's on high school curricula.

A.) The Relationship of Test Scores to Family Income:

ETS has not come forth with the statistics to support the argument that SAT scores correlate closely with family income, but the supposition is becoming a generally accepted fact. The Nader report was not the first to make this case. Humphrey Doermann, Crosscurrents in College Admissions (1968), suggested that verbal ability, as measured by the verbal SAT, and family income are correlated. In the "Round" Reports provided to Bates by the College Board, the relationship of SAT scores to family income is clear in each of the categories: prospective applicants, applicants, accepted students, and enrolling students. Almost without exception, high SAT's are accompanied by high family income.

Minority, blue-collar, and rural students have difficulty overcoming the disadvantages of being measured by this kind of testing. National averages for black students, for example, were 341 verbal and 366 math in 1981. White students did substantially better, scoring 440 on the verbal and 483 on the math SAT's. By not requiring SAT's, Bates could encourage a greater diversity of students to apply, students who are capable of succeeding at Bates, but who for cultural or financial reasons have not scored well and are currently being discouraged from applying.

B.) Coaching for the SAT's:

The Committee on Admissions and Financial Aid has serious concerns about SAT coaching. In the last several years, coaching for the SAT's has expanded geometrically. It is difficult to get exact statistics on the number of our students who have been coached, but since Stanley Kaplan (test preparation magnate) has centers in every major American city, the incidence is probably fairly high. One top private women's college surveyed its entering freshman class in 1980 and found that 20% of the freshmen had taken a test preparation course. Only a year later, the number had increased to 40%. When asked if the courses had helped improve their scores, the answer was "no" by a 2 to 1 margin in 1980, but only by a 5 to 4 margin in 1981.

Courses are offered in many high schools as part of the curriculum or as classes after school. Often the courses do not appear as such on the student's transcripts, or are taken as independent studies with the assistance of computer software. One guidance counselor recently acknowledged that he had made a \$12,000 profit (which he used to offset budget cuts) on the coaching software he had bought for the guidance office computer. The Boston Globe reported on the issue in its February 5, 1984, edition. A mathematics teacher at Lincoln-Sudbury (Massachusetts) High School, a school which regularly sends Bates between fifteen and twenty applications each year, openly acknowledged coaching

her classes. The students in this suburban Boston school had, according to their teacher, increased their scores, on the average, by 75 points.

Minority, rural, and low income students are again at a disadvantage in respect to coaching. Stanley Kaplan courses cost in excess of \$400. Disadvantaged students are unlikely to have the money to pay private tutors or to purchase software for home computers. Smaller or less affluent school systems cannot afford to introduce coaching courses to improve their students' scores. One counselor, on her returned questionnaire, commented on coaching: "The 'haves' buy what the 'have nots' cannot."

It is not yet possible to determine if coaching actually works. Since the Standard Error of Measurement for the combined SAT's means the total score could vary by as much as 120 points, ETS denies that preparation courses have an effect. Stanley Kaplan promises a 100 point increase on the two tests combined, so his promises are within the SEM. If coaching does not work, then the students using these services are wasting their time and, in many cases, money. If it does work, then students without access to it are being penalized—and the tests may lose some validity as tests of preparation for college.

Accompanying the increased incidence of coaching is a growing skepticism about the SAT's on the part of college admissions committees. On November 30, 1983, The Chronicle of Higher Education reported that Harvard University may make SAT's optional for admission, provided the student submits five Achievement Tests. Dean of Admissions Fred Jewett stated that while Harvard was not discounting the value of the SAT's, "We've noticed over the last two to three years the increasing value of Achievement Tests in predicting student performance." Other admissions deans agree. In a recent survey, returned by 75 other colleges, deans of admissions acknowledged that they were placing less emphasis on SAT's in admissions decisions. Achievement Tests, high school class rank, and high school grade point average were becoming increasingly important. Recommendations and the application essay were being used as better indications of the students' potential and desire to learn.

C.) The Effect of the SAT's on High School Curricula:

This leads to the third concern expressed by the Committee on Admissions and Financial Aid: the effect of SAT's on the American high school curriculum. Although there was no indication from the college admissions deans who returned the questionnaire that the coaching problem was altering high school curricula, there is evidence that this is the case. In the February 5 article in The Boston Globe, many teachers were including SAT strategies in their classes. A teacher at Malden (Massachusetts) High School remarked, "There's no way we can teach a student to have a 20,000 word vocabulary in a prep course. Instead, we try to teach kids how to take the test." Emphasis on writing and analytical skills is replaced by test-taking strategies. SAT

preparation courses do not generally improve the student's abilities or fundamental skills. It is certainly possible, for example, to raise the verbal SAT by memorizing vocabulary words, without improving reading comprehension or knowledge of grammatical English. The students who raise their scores in this fashion are not better prepared for college, they have simply improved their chances of admission.

The counselor at Phillips Exeter elaborated on this point in his returned questionnaire. Pressures from parents who want their children to score well and ensure prestigious college acceptances have made it difficult for high school educators to continue to teach courses which prepare the students for more than simply taking a standardized test. The counselor wrote:

Bates should try to tie its proposal to forego SAT's to the need for upgrading the education American students are receiving in the high schools today. By talking about preparation courses content and a core of liberal arts courses, Bates can help augment the efforts of high school teachers who want to make needed curricular reforms and help able kids learn as much as their energy will allow.

By adopting a policy of optional SAT's, we have the opportunity to do exactly that: to encourage high schools to prepare their students for a liberal arts curriculum which demands critical thinking, effective writing, and strong analytical skills.

IV.) Summary of Major Conclusions:

The Committee on Admissions and Financial Aid recommends that SAT's become optional for admission to Bates College. This recommendation is based on three major points:

- 1.) While the SAT's do have some predictive value at Bates, they are not critical to making good admissions decisions. The Achievement Tests can virtually replace the SAT's in a regression equation, or in a committee discussion of an applicant. The Committee feels that the other requirements for admission to Bates (three Achievement Tests, high school transcript, three recommendations, and the application essay) provide sufficient evidence of the candidate's qualifications for Bates College.
- 2.) The Committee feels that a policy of optional SAT's may have beneficial effects on the size, quality, and diversity of the applicant pool. Students who have used the median SAT's as a means of assessing their chances of admission as well as the quality of the College, will look further into the educational opportunities offered here.

3.) The Committee is concerned about the ethical issues connected with the SAT's. The relationship of the test scores to family income, the increased use of test preparation courses, and the negative effects on the quality of high school education cast doubt on the fairness of using the tests for admissions purposes.

Appendix I.

Annotated Bibliography:

- 1.) The College Board, "Aptitude and Achievement Testing in College Admissions", Research and Development Update, May, 1984. The Board will not make the actual data available until September or October, 1984, but among the conclusions was that Achievement Tests and SAT's are about equal in their predictive validity. The Board cited changes in the design of Achievement Tests which make them less factually oriented and more concerned with "comprehension and application of principles."
- 2.) The College Board has published quite a number of pamphlets on the issue of testing, including: Barbara Lerner, "The War on Testing: David, Goliath, and Gallup" (1980), Kenneth W. Ashworth, "The Pendulum and the Pit: Testing under the Knife" (1980), Richard W. Lyman, "The Case for Excellence" (1980). None of these is statistical in nature, though each states the College Board's perspectives on the tests: that while the tests may be misused by students counselors, and college admissions officers, they are useful measures, if not infallible.
- 3.) Educational Testing Service, "Test Scores and Family Income" (1980). The ETS responded to the Nader report by defending their tests and denying that there was a strong relationship between high test scores and high family income. ETS did acknowledge the relationship exists, but used a family income of \$18,000 as its cut-off for affluent families. Even though they were using data from the 1973-74 academic year, the figure seems low and throws doubt on their results.
- 4.) Fallows, "How Fair are the College Boards?" Atlantic Monthly, (February, 1980). Fallows agreed with the Nader report, attacking the SAT's as tests which were more a reflection of family income than anything else. "Unless one is willing to conclude that all smart people are rich, these results can only mean one thing: that standardized tests, created to offset one kind of privilege, have merely enshrined another."
- 5.) Lavin, The Prediction of Academic Performance: A Theoretical Analysis and Review of Research (1965). Lavin used a number of factors in predicting college grade point average, including the SAT's, IQ, and high school average or class rank. The last of these emerged as the most consistent predictor.
- 6.) Mauger and Kolmodin, "Long Term Predictive Validity of the Scholastic Aptitude Test," Journal of Educational Psychology (1975). The verbal SAT and math SAT were used to predict both the grade point averages of the first semester and the cumulative grade point average of graduating seniors. The SAT's were stronger predictors for both the freshman and the cumulative grade point average than they were for any particular major.

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- 7.) Nairn and Associates, The Reign of ETS: The Corporation that Makes up Minds (1980). Sponsored by Ralph Nader (and commonly referred to as "The Nader Report"), Nairn attacks the SAT's (and other standardized testing) as culturally biased. One of the more controversial claims of the report is that SAT's correlate most strongly with family income, thereby giving an advantage to students from affluent families in the college admissions process.
- 8.) The Stanford Curriculum Study (1983). Much of the information about the SAT's is directed towards describing enrollments in the various divisions and selection of courses based on gender. The Stanford study found the strongest correlation between the Math SAT and Engineering grades, however, "None of the correlations was of very large magnitude. . ." A more interesting correlation was that of class size with grade point average. At Stanford, the smaller the class, the better the grades. Stanford also discovered that the scores on SAT's and Achievement Tests influenced the selection of a major. This was truer for women than men (a woman with a low verbal SAT score was less likely to major in the humanities than a man with the same score, for example).
- 9.) Strenio, The Testing Trap (1981). One of Strenio's major objections to standardized testing is its misuse by educators. He refers to possible negative effects on the curricula in primary and secondary schools. Strenio discusses the impact and limitations of SAT's, but does not limit himself to these particular tests. The book is helpful in gathering together disparate studies, though the title does betray the author's bias.
- 10.) Trusheim and Crouse, "The SAT and Traditional Predictive Validity: A Critical Assessment," <u>Journal of College Admissions</u> (1984). This study used the SAT's, high school grade point average, and college grade point average. The high school grade point average was a far better predictor of grade point average in college.
- 11.) Whitla, "Evaluation of Decision Making: A Study of College Admissions," <u>Handbook of Measurement and Assessment in Behavioral Science</u> (1968). Whitla, a researcher at Harvard, discovered that high school teachers' evaluations of students were reasonably good predictors.
- Admissions (1979), published by the College Board. Their results are almost exactly parallel with ours: SAT's do have some predictive value for the first semester grade point average, but high school rank is the better predictor. This study goes on to discuss the value of recommendations, but determines that statistical measures are of greater value in correlation and regression analyses. This study correlates all data with the freshman GPA.

Appendix II.

Definitions:

"Correlation" describes the relationship between one variable and another. Correlations are measured on a scale of +1.00 to -1.00. For example, if all high testers were also good students, and all low testers were also poor students (neither of which is actually the case), the correlation of test scores and grade point average would be 1.00. If, on the other hand, all high testers were poor students, and all low testers were good students (also not the case), the correlation would be -1.00. Usually, correlations of +.50 or -.50 are considered very strong.

"Significance" is a way of expressing differences in results which are not the result of chance. Especially in the case of random samples, there may be some differences (which may or may not appear to be large) which are chance differences. In these cases, the probability is that, were the study repeated an infinite number of times, there would be no difference. Usually, significant differences are when the probability of a chance difference is only about 1 in 20 (.05).

"Regression analysis" is used in the prediction of one criterion by another. For example, many variables (SAT's, Achievement Tests, and class rank) may be used to predict grade point average. Because some of these factors are strongly correlated with each other (the verbal SAT is strongly correlated with the English Achievement Test), it is possible to replace one factor (the verbal SAT) with another (the English Composition Achievement) without greatly changing the accuracy of the prediction.

"Standard Eeror of Measurement" (SEM) expresses the range of accuracy of a particular test. The SEM of the SAT's is about 30 points for each test. A student who scores 600 on the verbal SAT or math SAT might score 570 or 630 the next time he or she takes the test. The SEM poses something of a problem for an admissions committee because the committee cannot be sure if the student is at the high or low end of the SEM unless the test has been taken quite a number of times.

"Round" reports from the College Board are provided to Bates College each year. The reports are based on students who asked the ETS to send their SAT scores to Bates. The reports are divided into prospective applicant, applicant, accepted student, and enrolling student categories. Using student responses to a lengthy descriptive questionnaire (high school record, socioeconomic background, college and career plans) as part of registering for the SAT's, the College Board provides considerable information (beyond SAT scores) about our inquiry, applicant, and enrolling student populations.

Appendix III.

Informational Materials on Reserve in the Ladd Library:

The following materials are on reserve in the Ladd Library and may be reviewed by members of the Faculty:

Paul A. Schaffner, "Competitive Admissions Practices When the SAT is Optional" (1984). This is the Bowdoin College research, described in the informational essay.

Articles from the Boston Globe (quoted in the essay), The Hartford Courant, The Christian Science Monitor, The Maine Times, high school newspapers.

A copy of the counselor questionnaire sent out in the summer of 1984, with the accompanying list of schools to which it was sent, a summary report, and copies of each questionnaire returned.

Copies of the 199 questionnaires by students who decided not to apply for the Class of 1988 after making good impressions in the interview, with a summary report.

The report on academic attrition cases, a study completed during the summer of 1984.

The Stanford Curriculum Study (1983).

Fallows, "How Fair Are the SAT's?", Atlantic Monthly (1980).

ETS, "Test Scores and Family Income" (February, 1980)

Lerner, "The War on Testing: David, Goliath, and Gallup" (1980)

Ashworth, "The Pendulum and the Pit: Testing Under the Knife (1980)

Lyman, "The Case for Excellence" (1980)

Nairn and Associates, The Reign of ETS: The Corporation That Make Up Minds (1980)

Appendix IV.

The Administration of the Optional SAT Policy:

Standardized testing of prospective students comes to the Admissions Office in one of three ways: a computer tape from the Educational Testing Service, a paper "hard copy" also from ETS, and the student's high school transcript sent by his or her guidance counselor.

Applicants will be asked if they wish their SAT scores to be part of the admissions decision. This year, we will send them a postcard when the application is received, in subsequent years, we will have a question on the application form itself. If the student's answer is "no," the application will be checked for SAT information, photocopies, made to facilitate future research, will be kept in a separate file, and the SAT scores (and subscores) will be inked out. This will give the application readers access to Achievement Test scores, but not to the SAT's themselves.

Some of the software programs used routinely in the Admissions Office print SAT scores on information sheets available to the deans. In the case of a "non-submitter", the code "NS" will appear in place of the SAT scores.

After the Class has been admitted and enrolled, we will use the photocopies to measure changes in the applicant, accepted student, and enrolling student groups so that we can continue to evaluate the value of the change. We will continue to require SAT's for matriculation at Bates College.