# Defining Promise: Twenty-five Years of Optional Testing at Bates College, 1984-2009 

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"Diamonds in the Rough: Why Every Institution of Higher Education Will Want to Attract and Admit Dyslexic Students"

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Image 1: Title page (Comments below are keyed to slide \#'s on the accompanying PPT.)
To begin, a comment on my title, "Defining Promise," as a kind of three-sided verbal hologram. The phrase refers first to defining the promise of students who apply to our colleges and universities, in this case a college with a 25 -year policy of optional standardized testing in admissions. Second, it refers to the promises which colleges and universities make to our students, to recognize their intellectual and human potential, and provide benefits from friendships to job skills. Third, colleges and universities make promises to society, to develop the knowledge and skills our country needs, and in consideration of which we are given benefits, including tax-free status. The first version of "Defining Promise" is the subject of this paper: defining the promise of students. But the latter two issues are not abstractions: we are having a conversation today about which students colleges and universities can serve, and what benefits accrue to students, universities, and society.

Two years after the Bates faculty voted to make SAT's, now SAT I's, optional for admission, I gave part of the closing keynote address at the NACAC national meeting, on the topic, "Admissions as Ministry." Four of us who had trained to be ministers and ended up as deans of admissions-Betsy DeLaHunt, Dick Moll, Zina Zacque and Idrew out, often with piquant humor, the parallels between the two careers, catching people at important watershed moments in their lives. Admissions deans, faced with the selection versus recruitment worlds, might say, "Wait a minute. Who am I supposed to be, Paul Tillich or Billy Graham?" Our Presidents would say, "Both, and look snappy, too." It was my best shot to say why I made Admissions my life's work, and people came up afterwards to hug us, often crying. On the plane home I saw my suit was ruined, from wet make-up.

It seemed no accident to me, then or now, that three of the four of us on that platform had led institutions to make testing optional. It was not that testing came from the forces of darkness-it hadn't. Bates is an active if left-wing member of the College Board, heavily using three of their services: AP, and two great data analysis tools, the EPS and ASQ. But in 1984, testing seemed to us to be occupying too much emotional space in the middle of the system. So we tried another tack, not with evidence that we knew it would be better or a statement of moral rectitude. But it was both a predictive and an ethical issue for us. It was an attempt to say, How can we find stronger, more promising students, help them believe in themselves, and turn their energies to what Howard Gardner calls "good work"?

## Image 2: Overview \& table of contents

We will look at some fruits of that thinking today. With a few comments at the beginning, this is mostly a lightening tour through the data of 25 years of optional testing.

Image 3: Two metaphors to begin
Some of you may know Woody Allen's wonderful movie, "Annie Hall", where he talks about a fellow who thought he was a chicken. People tried to get his relatives to get him into some therapy to get over this obsession about being a chicken, and the relatives said, "Well, we would, but we need the eggs."

At some levels, this discussion is about holding on obsessively to something that demonstrably may not make any sense. We might say to our young people, "You are not a chicken!" and say to each other, "These are not eggs."

And a Japanese Haiku from a fellow who teaches Asian fiction and film at Bates: This research is about being willing to take down a structure to see more clearly, to try a different way.

## Image 4: Background

From the outset, Bates has shared its data and research on the policy. We have published our research at 5 -year intervals, providing the data to anyone who asked for it. I want to offer praise to my co-author on this paper, Kate Doria, here today with us. Kate graduated from Bates last year and did the statistical analyses you will see, with two Bates statistical masters hanging over her shoulders. Last year we gave an earlier version of this paper together at a parallel conference at Yale, two weeks before she received her undergraduate degree. No surprise, first Carleton and then Amherst thought Kate looked like a young star as an institutional researcher.

There have been astonishingly consistent findings, and now with the long 25-year timeline, some intriguing alumni outcome data. Admissions research, like medical research, is always at least 4 years behind the decisions, or 7 years to get a 6-year graduation rate and get the research done, while grad school data reflect more delays before students start their programs. Finally, these are flesh and blood people, with a few fascinating curveballs: one of 2009's graduating Seniors was thrown out for a badly conceived prank in 1955, and came back to finish his degree at age 73, to thunderous applause at Commencement.

The report contains roughly 25 images on which we will comment, but running like a scarlet thread through the data are three fundamental issues:
(1) Does requiring the tests open or truncate access to higher education? Call this a marketing issue --who will apply?-or an access issue-who is admitted? Do the tests
artificially truncate the pool of people who would succeed if they could be admitted and given a chance?
(2) How predictive are the tests? Are they consistently predictive across populations? Are they "standardized" because people take the same test, or because their predictive value is consistent? As you will see, we seriously question the latter argument.
(3) What are the definitions of intelligence and achievement which a college (or society) signals to its youth with such a policy? What are the career and graduate degree results of our policy?

These are at root questions of social ethics and social policy: who gets to go to college? What are the definitions of intelligence and achievement? Two of America's lodestone educational thinkers, Howard Gardner at the Harvard Ed School, and the author Jonathon Kozol, have been our North Stars. Professor Gardner sees Bates as a small Petri dish of his work on intelligence intelligences, and as an "in the trenches" disciple of Gardner and Kozol, I acknowledge with a deep bow of gratitude his new gestalt on human intelligence.

## Image 5: Applicants, Admits and Enrollees at Bates College

First, the access or marketing issue. The applicant pool at Bates more than doubled, from 2200 to 5200 , since we made testing optional, while admits and enrollees went up marginally. The most basic question for any admissions dean: Can you get a better class from 2.5 times as many applications? Of course, and on all the scales.

Image 6: Gender in First Year Applicant Pools
Marginally, women applicants applied at higher rates than men, and international students and U.S. multicultural applicants grew steadily, but all cells of our pool increased.

## Image 7: Percentage of Underrepresented Minority Students

We now have enough applications from US multicultural students to fill the class twice over, and more than enough from abroad to fill the class twice over, with no American citizens in the class. Many of the international applicants are among the brightest people in their countries, and the influx of highly talented multicultural and international students at Bates has turned up the intellectual thermostat for everyone. 25\% of Bates enrollees are US students of color or internationals, a major change from a few years ago.

## Image 8: Non-submitters as a Percentage of Entering Class

From 1984 to 1990 about a quarter of the Bates students entered with no SATs; when all testing was made optional in 1990, the percentage of students not submitting testing rose to the mid-to-high $30 \%$ range. Over the last few years, the percentages of non-submitters
have been going up again, over $40 \%$ and sometimes approaching $50 \%$ of the class. This, for those of you who know the US News formulas, is a problem: they have an automatic penalty for colleges submitting data on less than $50 \%$ of their class with scores. US News, by the way, is facing an equally serious problem with the class ranks, as thousands of high schools have dropped class rankings.

In all our studies, we had statistical experts at Bates check our work. Michael Murray, an international economist at Bates who designs central economic plans and banking systems for third world countries, said to me, "Bill, you shouldn't be comparing submitters and non-submitters!" I thought, "Oh, no." He went on, "You should be comparing the enrolled non-submitters with the students you would have had to admit if you didn't have 2000 non-submitter applicants from which to choose the very best." He understands admissions funnels: at Bates and most colleges, that 2000 would comprise the entire wait list and a decent slice of the refuse pool.

## Image 9: Students Submitting Other Forms of Testing

A reasonable question: if more students are not submitting SATIs and IIs, do they submit other forms of testing? The answer is less than $10 \%$ in total, so even with these additional test formats, at least a third of our classes enroll with no testing.

Image 10: Demographics
What do the submitters and non-submitters look like? These next few slides are a snapshot of use of the policy by various populations of students.

Image 11: Percentage of Male and Female Students by Submitter Status
Modestly more women than men will use the policy...
Image 12: Percentage Ethnicity Categories by Submitter Status
...And use by non-whites is about $8 \%$ higher than for whites. Hispanic and Black students will have a majority of enrollees using an optional testing policy, at a rate about $10 \%-15 \%$ higher than the class averages.

Something important should be pointed out here. Optional testing is often assumed to be a device for an affirmative action policy, to open a narrow statistical review to a more complex, subtle reading. As you will see, it works as a technique for affirmative action: the students succeed and graduate. But note the arithmetic numbers at the top of the bar charts: white students using the policy outnumber the students of color by five to one. The policy appeals to all the subgroups which folk wisdom would tell you are the students unlikely to be helped by testing: women, rural and blue collar students, immigrants, LD students, students with spike talents in something (studio and performing arts, athletics, debate, leadership), and dual-language students, no matter what their ethnicity or citizenship.

We also noticed that the immigrant, multicultural and international students were often getting the best jobs and graduate school placements. The two youngest Bates Trustees in the history of the College are a Vietnamese immigrant debater from Texas who was working for Warren Buffett by the time he was 24, and a half Russian-half Senegalese woman who was the youngest person ever chosen to be a White House Fellow in the history of the program. Our poster child for optional testing has been a Vietnamese refugee camp immigrant. Only having spoken English for a few years, she was the valedictorian of her high school class of 320 , but had a 400 Verbal--we share that score with her permission-and applied to Bates as a non-submitter. She graduated Magna, PBK in Biology from Bates, founded a tutoring program for other immigrants, earned her MD from Brown, and was appointed as an internist to the medical faculty at Dartmouth. Since virtually all demographic growth in America reflects immigrants or people of color, we should ask ourselves, How did you do on the SAT--when you took it in Vietnamese? Or Spanish?

Image 13: Percentage of Students offered Financial Aid by Submitter Status
Few will be surprised to see that modestly higher percentages of those being offered grant awards are non-submitters. Perhaps the surprise is that the percentages are as close as they are. Again, the numbers in parentheses represent arithmetic counts, with about $40 \%$ of our students getting grant awards.

Image 14: Percentage of Students by State
Presumably, few surprises in a geographic sort: students from rural and immigrant states, and states with less familiarity with SATs are more likely to be non-submitters.

Maine students have heavy percentages of non-submitters, because so many are rural and low-income, with neither the money nor the geographical access for test coaching. We noted a high percentage of non-submitters that ran across the top of Maine, New Hampshire and Vermont - they turned out to be of French-Canadian heritage, US citizens for generations, but speaking French at home, and learning English at school.

Image 15: Academic outcomes.
Now we get to the second major point, the heart of this report: What are the productive results of the policy? If you take nothing else away, these next two slides are the heart of it.

Image 16: Mean Cumulative GPA for Submitters and Non-submitters
Over the 25-year history of the policy, the difference in Bates GPAs between submitters and non-submitters is .03 of a GPA point, 3.16 versus 3.13 .

Image 17: Mean Graduation Rates for Submitters and Non-Submitters

And the difference in graduation rates is $1 \%$. .. $03 \%$ of a GPA point and $1 \%$ in graduation rates! On this we hang the national sluice gates about who can go to college and where they go?

In a word, in a college with very demanding academics, non-submitters have earned the same grades, and graduated at virtually the same rates, as did submitters.

Image 18: Graduation rates for Submitters and Non-submitters by Ethnicity
Here is a 20 -year chart of graduation rates by ethnic groups. With an overall graduation rate of $89 \%$, no ethnic group varies from this by more than single digits.

Image 19: Mean SAT I Math and Verbal Scores for Submitters and Non-submitters
On average, Submitters score about 80 points above the Non-Submitters on the Math SAT, and 85 points above non-submitters in Verbal SAT, for a total SAT gap of 165 points. This TSAT gap has been amazingly stable for the entire history of the policy, and if there are reasons for that, we cannot see them. Like GPAs, which have very gradually and slowly climbed over time, so have SATs for both submitters and non-submitters.

Image 20: Mean SAT scores and Cumulative GPA for Submitters and Non-submitters by Ethnicity.

GPA information by ethnic group and submitter status. Not very significant differences, with the Black and Asian non-submitters doing marginally better than the submitters.

Image 21: SAT I Score and Cumulative GPA for Submitters and Non-submitters.
Testing seems to have only very minor correlation with GPAs: non-submitters seem marginally to outperform submitters with the same SAT scores, and for both groups, the lines are virtually flat, because almost everyone is succeeding.

Image 22: Distribution of Submitters and Non-submitters by Academic Division
Now to the third major point: how do wider definitions of achievement and intelligence play out in students' choice of majors, careers and graduate fields?

There are some modest over-weights toward submitters in math and sciences, and corresponding modest over-weights to non-submitters in social sciences, languages and self-designed and interdisciplinary majors.

Image 23: Distribution of Submitters and Non-submitters by Major
The patterns of distribution by majors are intriguing, and we have made four groupings of majors in this slide. First, in three majors generally regarded as among the toughest at

Bates - chemistry, biological chemistry and neuroscience - the percentages of submitters and non-submitters approximate the two-thirds, one-third ratio of classes as a whole. Second, in only three of our 32 majors is there a clear imbalance toward submitters-Math, Philosophy and Physics-but we found that there were no differences in GPA's in these majors. Third is a grouping of majors that folk wisdom would suggest are places that might reward imagination, intuition, unconventional thinking, interest in other cultures, and the like. In this group-African American Studies, American Cultural Studies, Art, Classical and Medieval Studies, Theatre, Women and Gender Studies, and Self-designed majors - there are patterns of non-submitters being equally or strongly represented. In our largest majors-Biology, Economics, English, History, Political Science and Psychology-there are only modest trends by submitters or non-submitters.

Image 24: Career and Graduate School Outcomes
With a 25 -year time line, looking at graduate degrees and career outcomes produces some fascinating patterns. In general, there is little evidence of submitters and non-submitters having different career tracks, with one glaring exception, which you will see.

Image 25: Number of Submitters and Non-submitters by Career Field
In creative or human service fields like the arts and entertainment, education, or marginally, finance, non-submitters are represented at slightly higher rates, while the opposite is true in scientific or technical fields.

Image 26: Number of Submitters (top) and Non-submitters (bottom) in Major Fields by Gender.

This slide divides career fields by both submitter status and by gender. Perhaps this image looks better than it would have 30 years ago, but it appears that it is not submitter or non-submitter that shapes lots of career decisions, but still gender. The shapes of the graphs from top to bottom are quite parallel.

## Image 27: Numbers of Submitters and Non-submitters in Selected Occupations

Another interesting snapshot of outcomes. We isolated alumni by careers, including two highly competitive fields, CEOs, (including founders, managing directors, heads of corporate divisions, etc.), and financial analysts/advisors (stockbrokers, hedge fund types, etc.). The percentages of submitters and non-submitters seem to follow the two-thirds/one-third patterns for CEO's. Measurably more non-submitters seem to be in Ibanking and finance, and we have found the same results with business consultants, another highly competitive career. But notice the splits with lawyers and doctors-there are dramatically more submitters.

Image 28: Percentage of Alumni Holding Masters and Doctoral Degrees by Submitter Status

Here is the glaring exception. Bates alumni earn graduate degrees at quite high rates: about $70 \%$ of all Bates alumni will earn at least one graduate degree. At the Master's Degree level, the percentage of submitters and non-submitters follow the two-thirds/onethird pattern. But in fields that require another high-stakes standardized test for admission, there are big, visible gaps between submitters and non-submitters: MBAs, PhDs, MDs and JD's.

I mean this as an honest and not a rhetorical question: are these the best, or just the best test-takers? Let that question go proxy for a lot of what we need to understand better than we do. It may be that at all three levels-K-12, college and grad school-testing dramatically truncates the number of people who are given access.

Image 29: Learning Differences
Doing research to dig out information and performance on students at Bates with learning differences was instructive. Just getting the data was a significant challenge, because it was until quite recently treated as individual medical information, kept strictly confidential, and not in electronic form.

Image 30: Mean Cumulative GP for Submitters and Non-submitters by Learning Difference Status.

In a word, no significant differences. LD students, given accommodations and reasonable support, have the same GPAs at Bates as do non-LD students.

Image 31: Percentage of Enrolled Students with Diagnosed Learning Differences and Graduation rates.

Students with identified learning differences rose gradually from 1\% in the class of 1999 to about $10 \%$ in the class of 2009. This probably says more about increased understanding of learning differences and Bates' decision to locate services for these students with an activist dean, part mother hen and part Marine drill sergeant, than it does about our testing policy. Percentages of LD students in the classes of 2010 and 2011 have come down to the $6-8 \%$ range, and we guess that something like $8 \%-10 \%$ of a class is a sensible expectation, useful for planning. In the first two years, the percentages are about $5 \%$, to be joined by students get diagnosed in college. An ongoing research topic is to see if students diagnosed while at Bates are likely to be on financial aid or from modest backgrounds.

We were greatly heartened to see a dramatic rise in the graduation rate of LD students from $50 \%$ a decade ago to about the class averages of $90 \%$ now. This represents in part Bates figuring out how to support and accommodate LD students, as well as lots of progress in other areas. The vast bulk of the accommodations are plain vanilla: extra time on tests, neither costly nor hard to administer, and widely supported by faculty. But anytime a college almost doubles the graduation rate of $10 \%$ of its students, that has the effect of improving the overall institutional graduation rate by $3 \%$ to $5 \%$, no trivial issue
for faculties, Presidents or Boards of Trustees, as well as the games of inches in the guidebook rankings.

America is only in the early stages of understanding LDs and how to screen for them. For those who accept the sarcastic saw that LD is a rich person's diagnosis, I recommend Kozol's Savage Inequalities and Amazing Grace, the latter with its account of the effect of toxic municipal incinerators in the South Bronx on skyrocking LD and asthma rates in those neighborhoods. I began my own teaching career in a junior high school in the Morrisania section of the South Bronx, and a lot more about teaching in that school made sense after I read Kozol's book.

Image 32. Percentage of Testers by Test-Taking Condition and SAT Scores for 2009 Testers in Standard and Non-Standard Test-taking Conditions

Our opening three policy questions were: Do the tests open or truncate access, how predictive are they across populations, and what are the definitions of intelligence and achievement that we signal with our policies?

Here is the data on LD and handicapped students from last year's College Board master profile: $2 \%$ of all testers were given permission to take the SATs under non-standard conditions, 32,000 out of 1.5 million. Their score results were 16 points lower on the verbal test and 26 points lower on the math.

Let's close with a little thought experiment, expanding these findings on Admissions testing out to issues of national access to education. I began this project in the early 1980's as a philosophic neutral, saying to anyone who asked, "Every college has to do their own research on predictors, and what we find might not be the same for another university." But I have gradually moved to the left on these issues, as the evidence has accumulated of the effects of testing.

There are big arguments about how to construct a class: whether by simple, public, inflexible criteria, or by all the complex, messy, intuitive, individual judgments that places like Bates make. But there is little disagreement that the "green card" of college admission is the de facto ticket to economic survival in our society. How should a society divvy up the chances for success? Is the purpose of admissions to maximize the profile of scores and ranks, or maximize the average first-year GPA (or more appropriately to focus on cumulative GPA and graduation rate), or to contribute to overall social improvement to level some economic ground-or some mix of all three? This is not a philosophic discussion. We all struggle with these issues, and don't know if we have it right. Our Presidents and Boards routinely tell us to be both Paul Tillich and Billy Graham in selecting a class: "Yes, do it all!" they say.

What will societies do with people who are quite literally turned away from the door of higher education, which has been our major national route to economic improvement? Here in California we already see the answer: you incarcerate them. Along with other
states, California now spends more on incarceration than it does on higher education, and at least from the recent Supreme Court decision, it has not worked.

The same questions Bates has asked about the SATs must be asked about No Child Left Behind, which is largely driven by standardized testing results. Few of us know enough about the particulars of the testing instruments being used in No Child Left Behind to have an intelligent opinion on their reliability. Bates is one of a handful of colleges to question the reliability of testing, and then carefully and publicly do the long-term research. Are school systems evaluating the tests they are using? Do we know if we are truncating our success rates by using testing, and if so, by how much and for whom? Hazarding a guess, at the K-12 level we might find a result parallel to what Bates has found, that human intelligence and ambition are far more complex and multi-faceted than any standardized testing system can capture.

It is sometimes said that an optional testing policy will only work at a small college able to read applicants individually and thoughtfully. With respect, we think this is nonsense. Many research universities read folders just as carefully as small colleges. More important, what are the public costs of not admitting students who would succeed, in order to run a simple, inexpensive admissions process driven by class ranks and testing? If Bates' experience can be extrapolated, we may be throwing away as much as a third of our national talent.

When Bates began this policy twenty-seven years ago, there were a few dozen colleges on the Fairtest list not requiring or de-emphasizing testing. Now there are over 800 colleges and universities, including some major flagships. We badly need rigorous research on their policies, done with a common protocol to see if Bates' results will hold up in a much wider study. Such a study would include, for example, some of the Texas and the California State system campuses, some liberal arts schools like Bates, Smith or Mt. Holyoke, perhaps a few interesting specialty art/music schools, and HBCU and MSI institutions. I am happy to tell you that a few months ago, a foundation decided to give me a grant for a major two-year national study to examine this question, and we plan to study about thirty colleges and universities of various types with one form or another of admissions access without required standardized tests. So my retirement has been postponed, but perhaps with a sequel to this talk.

Thank you.

