

Special Report

Think Tank on the Future of Assessment



Dear Colleague:

Shortly after becoming SSATB's executive director, Heather Hoerle reached out to an experienced group of industry professionals who understood and, in some instances, were already implementing, admission assessment practices and tools beyond the usual measures of academic aptitude. The result was the formation of SSATB's Think Tank on the Future of Assessment, and our team enthusiastically embraced the opportunity to be part of a group that could both explore and potentially shape the future of assessment within SSATB and the independent school community.



Pictured are members of the Think Tank at a recent meeting with Angela Duckworth of UPenn (third from right) and SSATB's Executive Director, Heather Hoerle (second from right).

Over the past year, we've attended some of the top conferences on the topic, engaged in thought-provoking debate on current admission philosophies and practices, and studied innovations in higher education admission. Furthermore, we sat down with some of the great thinkers in the assessment world and spoke with them about their research and its applicability to the independent school environment. The Think Tank monthly blog reports on all of these activities, and provides field insights on assessment from admission professionals and academic journals of interest.

Earlier this year, the Think Tank distributed a survey designed to better determine what admission and assessment tools schools currently use, and to gauge their interest in assessing non-cognitive characteristics. More than 260 members of the independent school community responded, and the results are published in this report. The survey certainly revealed respondents' hunger to study more of the work done by today's assessment pioneers and to hear the success stories of those already incorporating innovative thinking in their selection processes.

This report is the first step in joining the work of the Think Tank and the needs of our admission community. We're pleased to provide key insights from top researchers in the field, as well as profiles on enrollment and admission innovations.

There is a critical need for an ongoing conversation about 21st century admission and the measurement needs of enrollment managers. We hope that this report, and the continuing work of our Think Tank, deliver a greater understanding of the science of assessment, the future of admission, and the continuing research that will allow us to select the students that enrich and fulfill our schools' missions.

Committee Members:

Ray Diffley, Chair Director of Admission, Choate Rosemary Hall (CT)

Nancy Hayes, Director of Enrollment Management, New Canaan Country School (CT)

Jonathan E. Martin, Principal, Jonathan E. Martin Educational Services (AZ)

Marjorie Mitchell, Director of Admission and Financial Aid, The Westminster Schools (GA)

Ray Diffley Chair, SSATB's Think Tank on the Future of Assessment

Preface

Recognizing that the independent school admission industry's nomenclature now includes such words as, "grit," "perseverance," and "self-efficacy," SSATB convened a Think Tank on the Future of Assessment to study and review the emerging science of non-cognitive, character assessment and to consider the many forces (demographic, financial, technical) which are changing our work in 2013 and beyond. SSATB's Think Tank developed this report to introduce those chiefly responsible for enrollment management success in our schools to innovative ideas—both in theory and selection practices.

SSATB and members of the Think Tank believe that selective independent school admission will surely blend with 21st century measurement science in the near future. This unification will leverage both cognitive and non-cognitive data about applicants, which in turn will allow admission professionals to better understand their applicant pool and to make improved choices about candidates. The future promise is that all admission teams may one day go beyond the cognitive—and beyond instincts, observation, and third party verification—to scientifically quantify an applicant's attributes on such characteristics as intrinsic motivation, teamwork, and empathy.

SSATB aspires to lead measurement and assessment research for the independent school admission industry, and we look forward to final recommendations from the Think Tank next year (2014) as part of our strategic planning deliberations. SSATB remains committed to delivering a world-class admission test to assist in candidate evaluation, even as we begin to develop new services for admission professionals to ensure their continued success in the years to come.

For now, I encourage you to learn along with us about non-cognitive research, which is opening exciting doors into student character assessment, and to learn about the steps some of your independent school colleagues have taken to expand their selection processes.

Wather Moerle

Heather Hoerle Executive Director, SSATB

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Think Tank Survey Findings

Methodology

In January 2013, SSATB's Think Tank on the Future of Assessment conducted a survey to learn more about how applicants are assessed and evaluated for admission to independent schools. The survey was distributed to more than 800 SSATB member schools and to those on the ISED-L listserv. Two hundred sixty-nine responses were gathered; 86% of respondents indicated they were staff members of independent school admission offices, 6% identified themselves as educational consultants, and the remaining 8% played "other" roles within the independent school community. The two charts on this page report respondents' use of traditional assessment methods.

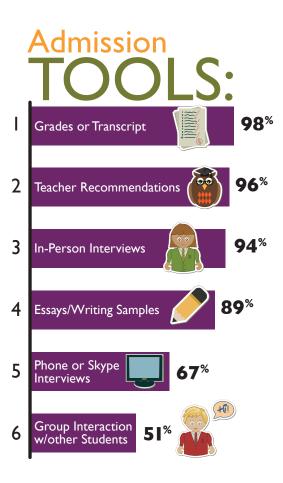
Survey Demographics

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Participants were well spread geographically as well as over segments of interest to SSATB, including day and boarding schools, coed and single-sex schools, religiously affiliated or non-denominational schools, and small-, medium-, and large- sized schools. Of those reporting, 54% were from day schools, 42% from boarding/day schools, and 4% were boarding only schools. 81% reported a coeducational environment, while 12% were girls only and 7% were boys only. 30% of respondents reported an enrollment of 700+, while 29% of the respondents enroll 301-500, 15% enroll less than 200, 14% enroll 500-700, and the remaining 12% reported enrollment of 201-300.

Cognitive Assessments Used to Evaluate Applicants



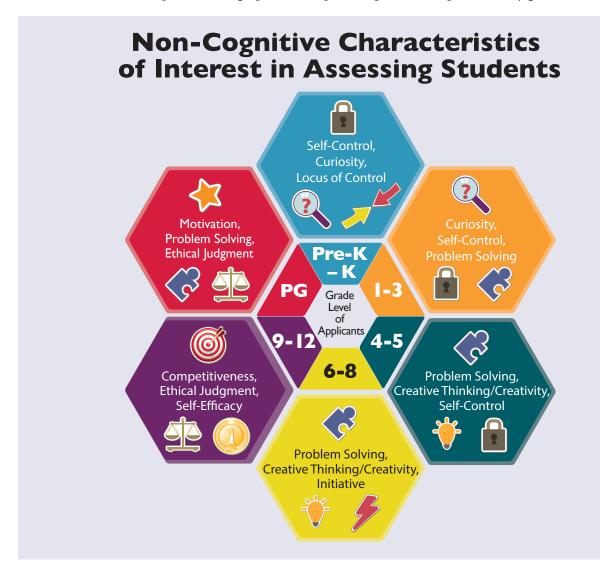


Geographically, the majority of those responding were from New England (20%), the Southeast (19%), and the Mid-Atlantic (17%). 13% of the respondents were from the West, 10% from New York and New Jersey, 8% from Canada, 7% from the Midwest, 3% from the Southwest, and another 3% from other countries. It is important to note that approximately 50% of survey respondents' schools support grades PK-5, while 72% support grades 6-8, and 90% support grades 9-PG.

Interest in Non-Cognitive Assessment

Survey participants were asked to freely describe what specific kinds of non-cognitive assessments they currently use for applicant evaluation. Sixty-two responded, citing various forms of on-site observation of student applicants, group projects during admission visits (with observation by trained teachers), behavioral and readiness assessments (school-specific), and parent essays (to determine family support for students).

The Think Tank also identified a list of 16 non-cognitive characteristics: Collaboration, Competitiveness, Creative Thinking/Creativity, Curiosity, Empathy, Ethical Judgment, Initiative, Locus of Control, Maturity, Motivation, Perseverance, Problem Solving, Resilience, Self-Control, Self-Efficacy, and Speaking Communications. Survey participants were asked to review the list and indicate their interest in assessing each characteristic in the admission process. The graph below reports respondents' top interests by grade level.



As shown above, interest in non-cognitive characteristics varied depending on the grade level of applicants. For PK-K students, the top three characteristics of interest (in order of magnitude) are Self-Control, Curiosity, and Locus Control; for grades 1-3, they are Curiosity, Self-Control, and Problem Solving; for grades 4-5, they are Problem Solving, Creative Thinking/Creativity, and Self-Control; for grades 6-8, they are Problem Solving, Creative Thinking/Creativity, and for applicants grades 9-12, the top three characteristics of interest in the admission process are Competitiveness, Ethical Judgment, and Self-Efficacy.

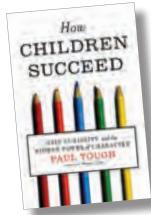
Suggested Resources on Applicant Assessment

Survey participants mentioned numerous resources to the Think Tank as possible areas for future discovery and investigation. These suggestions included: work by the University of Pennsylvania's Angela Duckworth on grit; Ray Diffley and the Choate Rosemary Hall project; Paul Tough's book, *How Children Succeed*; the triarchic theory of intelligence promoted by Dr. Sternberg; Howard Gardner's multiple intelligence research; Carol Dweck's research in *Mindset*; Daniel Pink's *A Whole New Mind*; Sir Ken Robinson's focus on creativity; Tony Wagner's research and books (*Creating Innovators* and *The Global Achievement Gap*); *Nurture Shock* by Po Bronson and Ashley Merryman; and EQ work by Daniel Goleman.

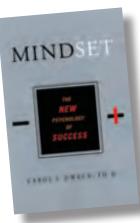
Innovative Schools/Organizations Working on Admission Assessment

Participants were aware of the non-cognitive research being conducted by Ray Diffley at Choate Rosemary Hall and cited it numerous times. Additionally, they referenced their own activities, which invited self-reflection with applicants at various grade levels—all focused on better understanding student noncognitive behaviors and skills.

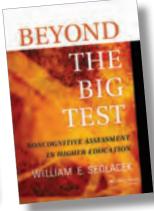
Suggested Reading



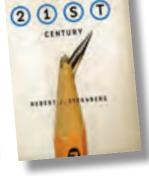
How Children Succeed Paul Tough



Mindset Carol S. Dweck, Ph.D.



Beyond the Big Test William Sedlacek



COLLEGE ADMISSIONS

College Admissions for the 21st Century Robert J. Sternberg

Think Tank Track at the SSATB Annual Meeting "Book Club" with Jonathan E. Martin September 20, 3:15-4:30 pm

The SSATB Think Tank invites you to read along and join us in our exploration of some important books in this field. Join this session for "book-club" style conversation in Philadelphia. Breakout groups will focus on each specific title.

We look forward to hearing your interpretations and applications of each book's main ideas.

Admission Testing in Context

-Dr. Catherine McClellan, Principal Scientist, Clowder Consulting, NJ

If you work in standardized testing like I do, you quickly become reluctant to admit it in casual conversation. I cannot tell you how many perfectly nice parties and plane rides have been taken over by stories of how a test (usually the SAT) ruined someone's life. I have heard, "Oh, I'm not a good test-taker," and "Those tests don't represent the real student," more times than I can count. Indeed, abuse of test scores upsets and disheartens me; nonetheless, I am an advocate of using standardized test scores—in their proper place.



The SAT was created to help identify students with the skills and abilities to succeed, but who were not from the usual feeder schools into Harvard¹. In the

intervening 75 years, the test has changed, but the fundamental idea has not. Standardized test scores are used to inform decisions about allocating a scarce resource: education at a particular institution. They are a valuable, if limited, piece of a complex puzzle.

And the tests work well, by and large. Test scores used in college admission are among the best, if not the best, predictors of first year grade-point average (FYGPA). Grades are also predictive of FYGPA, but standardized test scores add predictive power over and above grades alone. Grades and transcripts are affected by factors such as the content of the enacted curriculum, grade inflation, local policies and practices, and inconsistent inclusion of "honor points" for some courses.

Standardized tests, in contrast, are just that: standardized. The reported score scale is consistent across students, across test administration sessions, and across years. Students do not take the exact same test form, but the results are structured and analyzed so that the reported scores are comparable. And for admission professionals, making comparisons is the very thing that they must do to select an incoming class. The more information they can bring to bear on that activity, the more accurately they can perform their task.

Aptitude, Achievement, and a False Dichotomy

Human beings, by their nature, like to classify things, and tests are no exception. Standardized tests are often classified as aptitude or achievement tests. Yet, the distinction between aptitude and achievement tests is clearer in definition and theory than in practice. Aptitude has to do with the ability to refine, learn, or acquire skills if provided with training—possession of potential. Aptitude is distinct from knowledge, learned or acquired skills, or understanding of facts. It is something of a "future-tense" concept: people with aptitude should be able to do something, whether or not they have yet shown this capacity. Achievement, on the other hand, tends to be defined more concretely as knowledge learned, skills acquired, or abilities honed. The intent is to define achievement in terms of information assimilated, knowledge

learned, and skills developed through participation and practice—the outcomes of education and learning. It is a "past-tense" idea: people who have achieved things have done them already and can show evidence.

Each type of assessment has its limitations. Aptitude often has been defined as something innate and fixed, unchangeable—despite extensive evidence that traits such as intelligence and aptitude are relatively plastic, and scores on aptitude tests change with time, maturity, and experience. Achievement tests would seem to be more "fair"—after all, they measure what an examinee has accomplished. But studies show strong associations between academic achievement and the quality of available instruction, socioeconomic status, parental education level, school resources, health, nutrition, peer groups, and a host of other factors.

Another difficulty in distinction between the concepts of aptitude and achievement comes in actually creating the assessment. Pure aptitude tests, it can be argued, do not really exist. In order to attempt a task intended to assess aptitude, an examinee must have sufficient achievement in auditory, reading, or other decoding skills to process and understand the directions, as well as the requisite encoding skills sufficient to respond in a format comprehensible to the examiner. It may appear easier to construct a pure achievement test, but that does not mean it actually is done. It is uncommon to see any test—standardized, classroom, or otherwise—on which every question is familiar and contains only content that has been explicitly taught and practiced.

Admission Testing: In the Balance

Admission tests intentionally are neither purely aptitude nor purely achievement tests, but a mixture of both. The goal is to determine if the student has a baseline set of skills that are necessary to successful functioning in the environment to which s/he has applied for admission—the achievement component. In addition, there are items that require the student to use acquired skills to reach beyond the already-known and process new data, combine or generalize skills to solve novel problems, and respond correctly to item types that may be unfamiliar—the aptitude component. Admission tests provide reliable information about the current status of a student's skills in the tested academic domains, as well as an indicator of the student's potential to extend those skills if provided further experiences and education.

Schools making admission choices among a group of applicants are deciding whether or not to offer resources (teachers, classroom space, equipment, time, etc.) to a student, with the hope/expectation that the student will be successful if s/he is admitted. Keep in mind that "successful" has a very broad set of definitions in the context of school admission, as students contribute positively to a school and student body in a variety of ways. While academic accomplishment may be the first avenue that comes to mind, and certainly is one that is important, successful students may contribute organizational ideas, leadership, family continuity, artistic or athletic talent, cultural diversity, scientific skills, or technological innovation, among a myriad of other factors that are important to a particular institution. Admission tests help inform the decision, providing insight into one aspect of potential student success.

What about Personal Characteristics?

"Non-cognitive" assessment seeks to measure traits, including persistence, creativity, leadership, motivation, teamwork, dependability, collaboration, and interpersonal skills. There seem to be obvious connections between such characteristics and success in academic environments. Why aren't these attributes routinely measured?

Skepticism about the reliability and validity of the measures is one factor. Many assessments of personal qualities are surveys, asking for self-report. In such inventories, the "desirable" answer often is obvious, and respondents may choose answers that are more flattering than realistic. These inventories are also coachable, once the responses, scores, profiles, or outcomes that result in preference for a reward become known.



T he Think Tank on the Future of Assessment began its study, as is good practice in any research project, with a thorough review of the existing literature on the subject. It was important for us to identify the key scholars in this field, study their work, and begin to abstract the essential findings.

To date, four scholars have emerged as especially influential to our work: Robert Sternberg, Angela Duckworth, William Sedlacek, and Carol Dweck. All hold Ph.D.s; all have been or are professors at leading research universities. All have published prolifically in peer-reviewed academic journals, and all but Duckworth have written one or more books for general readers on their research. Duckworth's research has been written about in a recent general audience book by journalist Paul Tough.

It should be noted that although all four scholars study and report on assessing so-called non-cognitive attributes in students, only Sedlacek and Sternberg write expressly about the application of their research in the admission arena.

The Think Tank is very fortunate to have met, in full or in part, with three of these four as of this writing (all but Dweck). These conversations were intellectually exhilarating, but more than that, inspirational and profound too. These are not just fine thinkers; they are also emotionally engaging and passionate about social justice, expanded opportunity, and improving the environments of schools and universities.

— Jonathan E. Martin



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Robert Sternberg

There's probably never been a person who has thought as long, as much, and as hard about how we should assess intelligence in all its many facets as Robert Sternberg. An academic who began his career as a C student in freshman Psychology and became the President of the American Psychological Association, he never wavered from his original passion: to reinvent the way we assess the aptitudes and strengths of learners, particularly with regards to selective admission.

A prodigious scholar, Sternberg has published more than 1,000 articles and books in this field. Perhaps most accessible among them is his excel-



lent introduction and overview, *College Admissions for the 21st Century*, which offers great insights for the work of K-12 admission and ought to hold a prideful place on every admission director's bookshelf.

More than most scholars, Sternberg is also a true practitioner. As a university academic administrator first at Yale, then Tufts, and now Oklahoma State, he has implemented new, original, and fascinating admission assessment programs designed to practice what he preaches. Each assessment program—Rainbow at Yale, Kaleidoscope at Tufts, and Panorama at Oklahoma State—was designed to reflect each institution's mission. (In June, Sternberg will become the president of University of Wyoming.)

Sternberg met with the Think Tank and shared with us his thesis: "Traditional standardized tests, and even school grades, give us good information about some valued skills of students, but practically no information about other valued skills. If we wish to develop students who will be the active citizens and future leaders of tomorrow, we need to measure a broader range of the skills important to future success—not just the memory and analytical skills measured by standardized tests, but also creative, practical, and wisdom-based skills."

Sternberg seems to live by the motto that there is nothing you can't measure. He is undaunted in his determination to find tools to evaluate creativity, non-cognitive attributes, and ethical judgment. But his determination doesn't diminish his skepticism. Many assessments intended to be alternatives to aptitude testing, he believes, end up reverting, invariably, to IQ-correlated ability—and hence add no new value.

He believes, however, that creativity can be separated out, and is of the utmost importance. After all, he reminded us, creativity is required when students confront novel situations, and at the core of admission evaluation is determining who among your applicants will thrive when confronting what will most certainly be a novel environment to them—your school. Sternberg prefers tasks which ask students to write a story when given only an odd-ball title, or to caption a cartoon. The criteria for excellence is not so much the quantity of ideas but instead whether the thinking and doing is "novel, compelling, and pertinent, or task appropriate."

Why would you not ask of your applicants, as he did at Tufts for instance, to tackle essays or interview questions which might reveal their ability to "see multiple points of view, understand long-term as well as short-term implications, and think for the common good?" Why would you not treat seriously what you learn from their responses?

A former and likely future independent school parent (he proudly shows pictures of his three-year-old triplets), Sternberg has shared his own creative, practical, and wisdom-based intelligence with our SSATB community by advising Choate Rosemary Hall's work and research on non-cognitive assessment. Sternberg's associate, Elena Grigorenko of Yale's Child Study Center, has also worked with independent schools such as Lakeside School (WA), and the Sternberg impact can be seen in the essay questions of the Northwest Admissions Collaborative's common application form.

Angela Duckworth

The "guru of grit," Angela Duckworth, Ph.D., Assistant Professor of Psychology at the University of Pennsylvania, would like her followers to know that she has a much wider perspective about the traits that matter. In discussions with the Think Tank, she shared with us the work she has been doing with several organizations to identify and categorize a broad array of critical workplace skills and character traits—everything from interpersonal skills such as empathy and social intelligence to the wide array of intrapersonal skills such as confidence, self-efficacy, growth mindset, and self-discipline.



Grit is, nevertheless, where she has made her mark. It is the topic of many of her research papers, all of which can be found freely accessible at her excellent website (www.sas.upenn.edu/~duckwort), and is the subject of her widely viewed "TEDx" talk at the Blue School in New York City.

Duckworth's research on grit is featured in the recent, much talked about book, *How Children Succeed*, by Paul Tough. In it, Duckworth explains, "The problem, I think, is not only the schools but the students themselves. Here's why: Learning is hard. True, learning is fun, exhilarating, and gratifying, but it is also often daunting, exhausting, and sometimes discouraging. To help low performing students, educators and parents must first realize that character is at least as important as intellect."

She's often asked how she defines grit, and her most common answer is this: Perseverance and the passionate and long-term pursuit of a goal. She distinguishes it from a closely-related concept: "Self-discipline is doing your homework when you need to, staying on a diet. Self-discipline is great for homework and GPA, but not such a great predictor for whether you are going to found Blue Man Group and stick with it for many years." Indeed, sometimes they are at odds. There are many students who are extremely disciplined in getting their daily work completed but have no strong commitment to a long-term passion or interest.

"Deliberate practice spells success: Why grittier competitors triumph at the National Spelling Bee," published in *Social Psychological and Personality Science*, is perhaps the most pertinent and telling Duckworth research article. As the abstract describes: "Perseverance and passion [grit] for long-term goals enable spellers to persist with practice activities that are less intrinsically rewarding—but more effective—than other types of preparation."

A freely available survey/self-assessment tool for measuring grit is available on her website, and several schools are studying how they might use it in their process. Duckworth's research has found that the self-assessment provides statistically significant evidence for predicting success, but she cautions against using it alone as a tool for high stakes admission assessment, because of the potential for "fakeability."

However, she does think that these survey tools can be used as part of a "triangulation" approach to assessment, including teacher recommendations and reviewing resumes or extracurricular listings to evaluate applicant's perseverance in an activity they are passionate about.

In conversation with the Think Tank, she commended SSATB's initiative to explore additional forms of admission assessment beyond the cognitive. "The culture is shifting right now in such a significant way to recognize, appreciate, and form a common understanding of these concepts and their importance. I can see why SSATB and independent schools would be taking a lead on this. Independent schools have so much more room to innovate and experiment."

William Sedlacek

Professor Emeritus of Education at the University of Maryland William Sedlacek's motivation for promoting non-cognitive assessment was forged in the crucible of the Civil Rights Movement, and his passionate commitment to social justice comes through in every presentation and conversation he has on the topic.

Concerned that traditional assessment tools don't do enough to identify, recognize, affirm, and honor the qualities present in underrepresented populations which prepare them for success in selective institutions and agencies, he has spent decades developing and promulgating assessments that will.



His thesis, which can be found in his signature book, *Beyond the Big Test: Noncognitive Assessment in Higher Education*, conveys a both/and philosophy: "We do not need to ignore our current tests; what we need is to add some new measures that expand the potential we can derive from the assessment. The goal of using non-cognitive variables is not to substitute this approach for the cognitive focus more commonly employed in assessments, but to add to the range of attributes that we can consider in making the many judgments required of us all."

Why? He has a wide set of reasons, including one familiar to many SSATB members. It is what he refers to as "restriction of range" or the "topping out" phenomenon: "There is an increasing statistical problem of restriction of range—we've 'topped out' on a lot of exams—we don't know how to measure any better at the high ends of achievement. This is compounded by the problem of grade inflation, which is huge—average GPA has risen half a grade in the last decade."

A second issue is what he likes to call the "Three Musketeers" problem, referring to their familiar slogan, "One for all and all for one." Diversities of intelligence, and of success strategies, are just far too wide to be effectively captured in a single metric, or even in a small set.

"Working effectively within a system," he replied, was first among equals when asked which one criterion he would choose, if he could choose only one, to evaluate applicants. However, his life's work has been conversely structured—refusing to accept such narrow limitations, or declining ever to choose just one. He is determined to let a thousand flowers bloom. He encourages and supports institutions to choose the attributes perceived to be most important to their unique setting, select for that, and evaluate the effect.

Positive self-concept, realistic self-appraisal, preference for long-term goals (a near synonym to Duckworth's "grit"), and leadership experience are other variables he recommends schools evaluate, measure, quantify, and employ in admission. For each of these critical non-cognitive traits, Sedlacek provides a set of positive and negative evidence—framed as inquiry questions—which admission officials can use when reviewing an applicant.

Sedlacek promotes the use of self-evaluation surveys, and he provides a dozen or more research-tested surveys on his comprehensive and "open source" website (www.williamsedlacek.info). But he encourages admission committees to look for evidence of sought-after attributes in a wide variety of ways: in an administered survey, in applicant short-essay answers, in interviews of applicants, or in review of the full applicant materials. All of these approaches are fully explored in his book, which is both a research volume and a true working handbook.

Carol Dweck

Mindset matters. Henry Ford articulated this principle a century ago when he said, "Those who believe they can do something and those who believe they can't are both right." No other finding in educational psychology in this century has proven more meaningful, and, increasingly, more influential than that our attitudes—the way we believe we learn, the way we understand our own intelligence, and more—have enormous influence on how well and how much we learn.

Although there are other scholars who are valuably contributing to this field, Carol Dweck, Ph.D., is the central figure in this movement. Professor



of Psychology at Stanford University, she is author of the authoritative and highly accessible book, *Mindset: The New Psychology of Success*, published in 2008. According to Dweck, each of us, child and adult, sit somewhere on a spectrum between two poles: the fixed mindset and the growth mindset. Under the influence of the fixed mindset, we believe that our intelligence is rooted primarily or entirely in our natural-born capacities, which don't substantially shift in our lifetime; our success or lack thereof derives from our innate capacity. By sharp contrast, the growth mindset understands that inherent ability is only a tiny factor in what makes us successful. By and large, we make our own success, or don't, from our effort and our perception of what is possible.

One of the landmark journal articles about these two mindsets reported: "In a study with 373 7th graders, the belief [among students] that intelligence is malleable (incremental theory) predicted an upward trajectory in grades over the two years of junior high school, while a belief that intelligence is fixed (entity theory) predicted a flat trajectory," (Blackwell, L., Trzesniewski, K., & Dweck, C.S. 2007). Other research has found that mindset differences are especially significant for achievement among underrepresented student populations: "The growth mindset group showed significantly higher grades than the control groups. This was particularly true for African-American students, who also showed a sharp increase in their valuing of school and their enjoyment of their academic work," (Aronson, J., Fried, C. B., & Good, C., 2002).

Recognizing the significance of mindsets, admission officers might find it valuable to assess where on the spectrum each applicant lies. Dweck's site, Mindsetonline.com, offers a basic self-assessment, though the statements provided in this tool are repetitive and perhaps a bit too obvious. It can't be used effectively by itself, but it could be a helpful starting place in building your own growth mindset assessment tool, whether survey instrument or interview form.

Although the Think Tank is unaware of any schools using the Dweck growth mindset assessment spectrum explicitly as a tool for admission, surely many look closely at attitudes toward learning generally. When Ray Diffley described to Angela Duckworth the three areas evaluated in the Choate Self-Assessment[®] survey, (self-control, locus of control, and intrinsic motivation) she immediately linked "locus of control" to the Dweck growth mindset as effectively equivalent.

Fascinatingly, there is a growing body of evidence that indicates student attitudes can be influenced even in the moment they are undertaking high-stakes testing or interviewing. Simply by reminding students to "reappraise" their own anxiety as something not detrimental to performance but possibly helpful—telling them orally or in writing that "recent research suggests that arousal of anxiety doesn't hurt performance on these tests and can even help performance"—can improve performance considerably (Jamieson, et al., 2010). Mindset matters.

The Choate Self-Assessment®

Ray Diffley, Director of Admission at Choate Rosemary Hall, is frank when it comes to describing the admission process. "It's edifying. We generally receive 2000-plus applications each year, and select 20%. After each year, we discuss process improvements, workflow, student insights, research options, and further assessment needs. Our process has advanced in the last decade, but the most substantial change has been the introduction of non-cognitive insights thanks to our research with Dr. Sternberg and his team. We've transformed the most challenging aspect of the job—determining a student's abilities outside the traditional cognitive realm—and introduced data to quantify what would have been just a gut reaction or personal opinions (and biases) in the past."

Diffley's decade-long research project on assessing non-cognitive attributes in his school's admission process was led by Dr. Robert Sternberg and Yale's PACE (Psy-chology, Abilities, Competencies, Expertise) Center and was featured in the Fall 2009 *Journal of Educational Psychology.* The research eventually culminated in an assessment that yielded significant correlations with students' academic success at Choate.



Ray Diffley

In its current form, the Choate Self-Assessment[®] is a 40-question tool (which is one portion of the full assessment documented in the *Journal* article) that measures the

following three areas: academic self-efficacy (a.k.a. self-confidence); locus of control; and intrinsic or extrinsic academic motivation. By scientifically targeting three key areas of measurement valued by educators and Choate's community, Diffley's team could responsibly introduce data on non-cognitive areas of assessment into their student selection methods.

Diffley is not lighthearted when explaining the need to balance the science of the study with its implementation. "Our admission team had to challenge everything we knew about our prior experience and research in the field of assessment, and recognize that integrating this instrument would transform our admission process," he reflected during a recent interview. "We were fortunate, due to the autonomy we were given, that our team could start formulating its deployment for the Choate applicant pool with little interference. The challenge was: How?"

However, Diffley was explicit in stating that a student must first present strong grades, appropriate test scores, and recommendations to be considered at all. "Once a student is in the ballpark, and many are, we then consider all elements of the application, including the Self-Assessment," he said. "We like to see how all elements of the application play together to create corroborative evidence in the student's profile. We can see where grades work in concert with test scores, interview elements, and more. Before the introduction of the Self-Assessment, we had to work with these domains and 'unscientifically' report on the applicant's perceived lack of, say, motivation, perhaps from interview responses or an essay. As a result of the Self-Assessment, we're able to create a common language and reference an actual score for these critical non-cognitive attributes, and to construct a student body that reflects what our school has shown to value in successful students."

Implementation

When the research study with Sternberg was finalized, the admission office and administration were faced with a dilemma: How to implement the Self-Assessment in a low-stakes, non-intrusive way so as not to alienate the family during the application process?

"Each of us had concerns about engagement levels and data integrity," explained Diffley. "If we introduced it in the process too early, say on the website, would we have students just taking it to get through it or engaging those who would not necessarily be serious applicants to Choate? The integration with the online application process was the logical answer to this puzzle." Choate purposely placed the Self-Assessment at the end of the online application process, and Diffley said it was met with overwhelming success. "Placing the assessment at the end of the process would imply that a family's commitment to Choate would be high. Yet, by making it an optional choice, we were able to lower the stakes a bit and keep anxieties in check." It's safe to say that this formula worked. While the assessment is not required, Diffley reported that 90% of those applying take the Self-Assessment when completing the application process.

Assessing the Pool

Once all electronic submissions are in the system, a norm scale is created around the three areas: motivation, locus of control, and self-efficacy. Within one standard deviation, the information is then translated into a number range of "healthiness" for each of the three measures. Each student's score per measured area is then placed into an admission evaluation report.

"With the norm scale being intuitive, training for staff was easier than expected," Diffley said. "Once we got past understanding the scales, we could quickly identify the 'outliers' in the applicant pool. For example, if we see someone with a high score on self-efficacy, we may debate if the student is overconfident or even arrogant, or lacks self-awareness. Then again they may be a positive outlier and a great leader...that's where the professional admission officer comes back in—the interpretation of the score is as critical as the score itself. The remaining application elements may present corroborating or contradictory evidence, but we have the scores as a baseline."

Beyond the Launch – 2 Years Later

Since launching the Self-Assessment, Choate integrated an informational presentation on the assessment at student orientation. Diffley indicated that the impact of the presentation has been helpful in assimilating the new students into the Choate culture. "This eases fears as new students are welcomed onto campus, some away from home or in a rigorous academic environment for the first time, knowing they are part of a community where more than grades and test scores are valued in achieving success," he explained. "For the outliers in the group, academic deans and advisers can prepare for these students to be successful, since we know these non-cognitive abilities are malleable."



Choate has partnered with the Yale Child Study Center, and Dr. Elena Grigorenko and her associates, to follow the students who participated in the Self-Assessment and to track their data with the goal of measuring the correlation of the Self-Assessment to long-term achievement. While the result of the work with the Yale Child Study Center is far from complete, some revelations about the new additions to the Choate student body have been enlightening. First, the research indicates that international students have lower norms on the self-efficacy scale. Results show little difference as it relates to gender on the three measures, but do find that students of color, much like international students, have lower norms for self-efficacy than do their majority counterparts. These insights have led the Choate admission team to analyze the Self-Assessment within specific demographic cohorts, but there is more work to be done to fully understand these nuances.

"The next step is determining how to integrate the accepted student's data into a developmental plan for our culture as a whole," Diffley said. "If we choose to create a campus-wide database with the scores, we could introduce a student attributes development program that will enhance the rated areas of measurement from the Self-Assessment for the duration of the student's tenure at Choate. It took 10 years to formulate, construct, implement, and assess the results of the work with Sternberg and to identify the Self-Assessment as the most effective tool for our admission needs. The next three to five years will challenge the Self-Assessment's current role and, most likely, create an evolved version that lives both inside and outside of the admission process."

Mission Critical Measuring and Developing Students' Mission Critical Skills



Tim Bazemore

New Canaan Country School (CT) Head of School Tim Bazemore knew his team's communication efforts about the Mission Skills Assessment (MSA) were well underway—with posters in the hallways, bookmarks in the hands of students and parents, and teachers introducing character skills into daily lessons. However, he was pleased to see the lexicon in his school shift quickly to emphasize six words: *teamwork, creativity, ethics, resilience, curiosity, and time management.*

"We've been cognizant of the idea that the MSA program could be viewed as the 'the latest thing' in our community, but it's been more," said Bazemore, who led the school into the MSA pilot in 2010. "Our teachers are optimistic about the future impact of the assessment, and our parents are excited about the potential to improve their children's success in relation to these six key areas. It's in our culture now, and we're only two years into the program."

The Genesis of the MSA

New Canaan Country School is a member of the IN-DEX Group, a non-profit research consortium of 100 schools led by Executive Director Lisa Pullman. Thirty schools, including New Canaan, form a consortium within the consortium, focused on elementary grades research. The MSA was born from discussions which began five years ago.

"Our elementary group strongly believed that the K-8/9 structure is well-suited to teach kids character traits," explained Bazemore, who serves as vice-chair of the INDEX Board. "We know that 8th and 9th graders in a K-8 or K-9 environment are impressive school leaders and exemplify the values proposed in the school's mission, but we needed a way to prove it. Our group questioned whether we could assess these skills and see if we were teaching these character traits as effectively as we believe we are."

INDEX found a research partner in Rich Roberts, Managing Principal Research Scientist at ETS's Center for Academic and Workforce Readiness and Success, and he and his small team of scientists, research assistants, and interns began constructing a revolutionary assessment that would individually test children, but only use the results as it related to the school's claims and delivery of teaching these essential character traits to its student body. "The timing for the project was perfect," explained Roberts. "ETS had just released the Personal Potential Index (PPI), an assessment program designed to quantify the attributes of graduate school candidates."

What is the MSA?

The MSA is a longitudinal assessment measuring and benchmarking student achievement and improvement in core mission skills.

- Web-based.
- Student self-assessment.
- Two 30-minute tests for approximately 60 minutes total.
- Assess once per year.
- Situational Judgement Test (SJT) and other studentcompleted performance measures.
- 6th, 7th, and 8th graders.
- The test is fun! There are no wrong answers.
- Teacher-rater assessment.
- Teacher rates each student individually.
- Outcome data (e.g. test scores, grades, absences, etc.).
- Institutional focus. No tracking of individual performance.

Roberts's team began by examining the mission statements of the pilot schools, and it was clear that six character strengths were present in the majority of them: teamwork, creativity, ethics, resilience, curiosity, and time management. "What was of particular interest was how well these six traits were aligned with many studies examining successful factors in the workforce," said Roberts. "The Conference Board, Corporate Voic-es for Working Families, Partnership for 21st Century Working Skills, and the Society for Human Resource Management conducted a study, and all six of the traits identified by the MSA were rated 'very important' by corporate participants. We knew we were onto something."

Constructing the Test

There were concerns from both the schools and the researchers that non-cognitive skills are hard to measure, and the right research method had to be constructed in order to warrant students' time. Roberts and his team believed that a multi-trait, multi-method (MTMM) design would work best. The MTMM design is essentially a form of triangulation, allowing a more precise measurement of each of the six main attributes, and getting around potential pitfalls prevalent in using one approach in isolation. For example, just asking students to self-report on their time management relies too much on accurate self-reflection, and in any



event such questions can be faked. Adding other approaches (e.g., a teacher report) to form a composite variable representing time management reduces the impact of these irrelevant factors. The result was an assessment that includes a self-reporting mechanism, third party validation, fluency tasks, and the use of an innovative item type called the Situational Judgment Test (SJT).

The self-report mechanism is a simple online questionnaire on which students choose "never, sometimes, often, or always" to describe themselves. Statements like, "I am a good team member," and "I'm a good listener," provide insight into the student's self-perception. For the third party validation, teachers are given a similar form to rate students on similar questions.

Fluency tasks involve train-of-thought responses. A fluency task to measure creativity might ask a student to "Name all things that are green." The challenge here is that humans are needed to evaluate the responses, though Roberts told SSATB that ETS is working to develop an artificial intelligence system that could perform these kinds of evaluations.

The SJT presents real-world scenarios authored by teachers and students, and the student reports his or her reaction or action to a presented case via multiple choice options.



Rich Roberts

The Findings

and various item types. SJTs are generally used in organizational psychology but, when in play in an educational environment, no less with kids of this particular age, we found a great response from students, and discussion following the test on why they answered a particular way, what they would do differently if presented with a similar, but different situation, and more," explained Roberts.

"The great advantage of the MSA is that it was constructed using multiple approaches

Both Bazemore and Roberts emphasized that the MSA is still very much in the research phase. To date, 20 INDEX schools and 2,600 students have participated in the study. Bazemore and Roberts report that an additional 40 schools will use the assessment this year.

"The assessments to date indicate that the MSA demonstrates evidence of reliability and validity, and they predict meaningful outcomes such as student well-being," commented Roberts. "However, these are all initial findings and need further analyses utilizing a larger student sample and further time points. Regarding this last comment, one can build better models of these student skills if we have longitudinal data."

Roberts did, however, provide some preliminary findings: initial results indicate emerging differences in gender, with girls scoring higher on the vast majority of these non-cognitive skills. Additionally, following the trends found in most non-cognitive educational testing literature, performance on the assessment dips from sixth to seventh grade, then bounces back up in eighth grade.

"It's my job to look at the evidence the data provides and, in partnership with the schools, determine whether it is appropriate to make adjustments to curriculum maps, policy, and more," added Roberts. "However, what has been most gratifying is to see students breathe in the lessons of these assessments and partner with teachers on character development in the classroom. It is good to know that the assessments are contributing to some incredibly transformative work for these schools."

Unforeseen and Cross-Campus Benefits

As both Bazemore and Roberts attested, the cultures of these schools are shifting. And, teachers are leading the conversation.

One of New Canaan Country School's teachers has developed a virtual teacher network among study schools to share and create curriculum, while administrators are using feedback from these groups to develop training and professional development opportunities for their faculty and staff—within departments, across departments, and with other participating schools.

"Our parent and board response is very enthusiastic—because teachers are stepping up and leading the charge," added Bazemore. "Our teachers are really owning this, and we want to give them any tool we can to support their growth."

Bazemore found inspiration from other INDEX schools participating in the MSA. "We're really learning from one another. The Lexington School in Kentucky has done a great job communicating with parents through an MSA web presence. Far Hills Country Day in New Jersey has gone so far as to take the results and developed a curriculum map and systematic analysis around the MSA that it's sharing with its parents and community. Far Hills has set the bar high."

Bazemore was quick to state that the data is still too thin for sweeping changes at New Canaan Country School, but adds that the MSA has brought new life to the NCCS campus; "The conversation at our school has changed, because we've brought science and research to measure the mission traits of our school. Hallway conversations are no longer only about a storyline from a piece of literature in English class. The conversations are about how the characters in the story could have developed better teamwork or been more resilient. This is happening only two years into the MSA program. I can only imagine what it'll be like in five years."

The MSA, while an outcomes-based measure, certainly has major implications for the independent school admission community. "Admission professionals have to sell the value proposition of a school and that's what lives in a mission statement focused on building character," commented Roberts. "Admission testing gauges kids as they are coming in, and the children are tested for various academic achievements in the classroom, but there was no formal way of saying if the value proposition sold to these families at admission was being accomplished by graduation. The MSA holds this promise."

Profiles^{of}Success

When successfully implemented in the independent school admission process, non-cognitive assessment reflects a school's specific educational program and values. The following profiles spotlight a number of SSATB member schools, which are introducing new methods to bolster their traditional, cognitive measures, while connecting to each school's mission.

Phillips Exeter Academy (NH) The Sedlacek Eight in Play

Midway through the previous decade, Phillips Exeter Academy announced an exciting new initiative, "Youth from Every Quarter," in which every admitted student from families with annual incomes under \$75,000 were

"As you can imagine," Admission Director (and SSATB Trustee) Michael Gary says, "This opened up the floodgates of applications and greatly diversified the applicant pool. The traditional admission assessment process was not in keeping with these changes, nor with the spirit of the new initiative."

As Gary recollects, Exeter's Dean of Faculty heard a presentation by William Sedlacek at a conference about the work he was doing to select students of diverse backgrounds for the Gates Millennium Scholarships, and came back inspired. Before long, they'd engaged Sedlacek as a consultant. The entire faculty and administration read his landmark book, Beyond the Big Test: Noncognitive Assessment in Higher Education, and "Sed" spent several

As Gary recounts, "He changed the conversation for us, really opening it up to new dimensions. We were not, of course, doing away with standardized testing, but we came to a much deeper appreciation of another layer of applicant assessment.

"One of the key things he did for us was to provide us the compelling, authoritative research evidence which corroborated what we already intuitively knew mattered. This helped us immensely."

Two key changes were implemented. In one, the admission office re-tooled the interview forms and added in small print on the back of every form the "Sedlacek Eight"-the key non-cognitive attributes his research had determined most significant. Interviewers were trained to seek out evidence and examples of these, and to ensure they included this information in their interview write-ups. They also did



Michael Gary

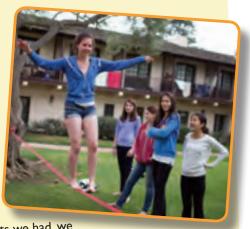
something very interesting: knowing Sedlacek had advised the admission office of Oregon State in developing short essay questions for their application designed to elicit meaningful information about these same attributes, they asked, and were granted permission to borrow and employ these same questions on the revised application forms for some of their higher-grade level applicants.

Cate School (CA) A Walk in the PARK

At Cate School (CA), their educational mission is "to promote the greatest growth possible for each student and teacher."

A comprehensive program called PARK-Persistence, Awareness, Responsibility and Kindness-serves as the school's touchstone as they strive to "develop well-being and leadership through the practice of self-discipline and service."

Admission Director Charlotte Brownlee explains that it became important to align the school's mission-driven emphasis on human growth in its curriculum with its admission process."We realized that



though teacher recommendations were among the most useful documents we had, we were not asking the right questions of our applicants, and we were not getting the right information. We radically changed our teacher recommendations forms, making them more behavioral-based on what we believe are the key attributes of success at Cate."

The teacher and counselor recommendations now include statements evaluating the candidates on dimensions related to the PARK program, such as "Becomes easily bored," "Demonstrates excitement when learning something new," and "Demonstrates resilience when introduced to challenging concepts." Brownlee reports that the forms are still new and it is too soon to judge thoroughly, but anecdotally, "Teachers tell me all the time this class is special: its level of curiosity and maturity of thought are both higher. The new forms definitely have better information than before."

Still, they are not done. "We talk about Dweck and Duckworth a ton here," she explains, and they are looking for better ways to evaluate grit and the growth mindset of their applicants.

Westminster School (GA) The Trial and Error of Creativity

Returning home from the Chicago SSATB Annual Meeting and Robert Sternberg's keynote, Marjorie Mitchell, Director of Admissions for The Westminster Schools (GA), was inspired. Her school's application form had not changed in more than 15 years, and she wanted to offer an alternative method for students to showcase their interests and talents to help her committee to more easily distinguish between applicants—particularly in regards to their creative thinking. So, she decided to take a first step and changed the open response section of the application.

Inspired and illuminated, members of the admission committee developed these two new optional,

• Write a creative story or poem that includes one of the following sets of words: couple, water, red, running, and animal; car, green, Olympic Games, and camera; tree, road, fruit, danger, and

• Use your imagination to create and illustrate a scene from a story using one of the sets of words in item #2. While you will not need to write the story, please explain what you have drawn.

Mitchell reports mixed success with the initiative. While many students chose one of the new options, the committee was disappointed to find fewer than expected interesting essays from the middle school applicants; there were only a few memorable essays that file readers easily

recalled around the committee table. Furthermore, many students who chose the artistic option weren't strong artists; so perhaps it was tougher for the middle school applicants to choose the most appropriate option to showcase their talents. There were a few real gems, though. On the other hand, for the older applicants, she finds she's getting new windows into the minds of these students-these can be "revealing self-portraits"-and that reading has become much more fun and interesting. At this level, she says, "We found a lot more variety and extensions

Despite this mixed experience, she still sees the possibility that this part of the application may become a more useful differentiator than it has been in the past. One suggestion she makes—for prompts, is to be sure to limit the number of nouns in your word groupings and offer words that can be used in different ways/in multiple parts of speech.



SABERmetrics in the Admission Office

The admission team at Salisbury School (CT) is bringing the analytical skills of Moneyball's SABERmetrics to student selection. Working in part with SSATB's enrollment management services, including the Optimal Use Study, they con-

sidered a wide array of critical questions for admission effectiveness.

Emerging from their analysis was a deeper understanding of which SSAT test areas have the strongest relationship to GPA in both the first and second years at their school. But in addition to the importance of standardized testing for such predictions, they also determined certain non-cognitive qualities they particularly valued

in their students, such as grit, optimism, and benevolence. In the past, these types of qualities might have occasionally been brought up when considering applicants, but with SABERmetrics in mind, the Salisbury team sought to strengthen and make more consistent the role of these criteria in their process by quantifying them. Accordingly, they are now carefully evaluating each of these qualities in every applicant during their admission



interviews, and a point system has been established to ensure these "softer" attributes are factored right alongside test scores and GPA. Each candidate can now earn between one and three points for each of three categories: grit/optimism, benevolence, and reasons

Salisbury Admission Director Peter Gilbert reports that this work is informed thoroughly by the research in the field of psychology and assessment, including that of Angela Duckworth, and the grit scale she developed, and Marty for choosing Salisbury.

Seligman's optimism research.

New Canaan Country School (CT) Please Join Us in the Gym

New Canaan Country School's admission process begins, as it does for nearly every SSATB member school, with an application, school transcripts and reports, standardized testing, parent visits/interviews, and written parent/student statements. Yet at Country School, admission assessment has evolved to better evaluate student character. As Director of Enrollment Management Nancy Hayes describes, "Personal and social responsibility has always been integral to the work of our school and woven into the fabric of what we teach and how we teach."

Country School is rightly proud of its longstanding Outdoor Action Program, and they've adapted some of their Project Adventure activities to create an experiential-based component of their admission assessment process for the gymnasium. Hayes reports that the activity "gives us a tremendous amount of information about individuals: how they approach problem solving, how they team and collaborate, and more."

During the admission visit, the gym becomes an ocean of dangerous waters, as two groups of students have to determine a way to get the entire group across to the "safety" of an "island oasis" across the gym floor. Each group is given the same implements: a short rope, a small scooter, and a couple of lily pads that provide safe haven. Faculty members stand back and watch as each group discusses, plans, tries, and fails-and tries again. "It is so interesting to see who works for the whole group, and who is only concerned with getting themselves across: this tells us a lot," Hayes says. Committee members, who have not read the student files in advance, rate applicants on a wide variety of easily observable traits, including adaptability, enthusiasm, and resilience.

Hayes reports, "We think that in combination with the academic pieces, this informa-

tion has strong predictive power. We work hard in our committee deliberations to make certain we are considering the whole child and what kind of a community member he or she would be. We have certainly made great progress in really building a community, not just in taking the obviously capable student."



Evergreen School (WA) Scruples, IQ, and Thirty Feet of Rope

Eric Barber has only been Director of Admission and Enrollment Management at The Evergreen School (VVA) for two years, but he feels very fortunate for the opportunity and support he's had to take their admission process in new directions. His leadership is influenced, in significant part, by his experience as Associate Director of Admissions at Lakeside School (WA), where he was part of the team which worked extensively to revise and revamp the admission process with the guidance of Elena Grigorenko, a close associate of Robert Sternberg at the Yale Child Study Center. "I'm a huge Sternberg fan," Eric says "we were very enthusiastic about incorporating into our assessment practical, creative, and wisdom assessments."

At Lakeside, Barber took Grigorenko's recommendations and helped retool the Middle School admission essay and interview portions of the application. The assessment of students in a group interview consisted of a creative activity, such as "design a school for kids by kids," and an individual "scruples" activity, asking applicants to ponder how they would handle an ethically challenging event, such as realizing that a partner on a group activity had plagiarized his/her part. Creative and practical essay prompts were added as well. Evaluation of these components is not highly quantified, but viewed in a holistic way, and demonstrations of outlier behavior in these tasks are highly significant to the admission process.

The influence of Sternberg and Grigorenko has followed Barber to Evergreen and beyond, and can be seen, for example, in the common essay prompts of the Northwest Admissions Collaborative. To plumb creative intelligence, the following question was added: "Use these three words/ phrases in a creative story: slippery rocks, bus stop, thirty feet of rope." For the practical domain, they included this: "Please describe an instance when you had to make a difficult choice or made a personal mistake.What did you learn?"

Barber is currently working with his team at Evergreen to admit cohorts with a balance of temperaments in ECE/K admission. Surveying his faculty upon his arrival, he found that even though traditional IQ



tests are used to identify a highly-capable applicant cohort in the admission process, the Primary faculty did not view IQ as a strong success predictor. Rather, the strongest success attributes were on the non-cognitive side of the equation, in areas such as self-regulation, attention, and flexibility.

The Evergreen faculty conveyed the importance they saw in having classrooms with a balance of extroverted and social students, willing to jump up to contribute at a moment's notice, and those quieter students who take time to reflect. But the fear was the admission process too greatly privileged the socially outgoing kids, to the detriment of the quiet thinkers whose waters ran deep. Accordingly, Barber created what he calls "binary descriptors" that capture temperamental data on applicants, both in the reading of a child's application and during their visit observation, so the descriptors can be compared from different sets of data and evaluators. Now, he and the faculty are confident they are doing a better job identifying their applicant pool temperamentally and balancing the numbers of expressive and reflective thinkers in their classrooms.

Call for Profiles^{of}Success

Have a success story that you want to share? Email Trish Frazzetto at tfrazzetto@ssat.org with your story. We'll be posting more profiles on admission.org, Facebook, and Twitter.

Admission Testing in Context Continued from Page 8

One can avoid the issues of self-report by requiring someone other than the candidate to report about their characteristics. But whom? If the candidates select their reporters, the reports are highly likely to be positive. Asking teachers is one approach, but a teacher's level of personal knowledge of a student is influenced by a host of factors, including the extraversion of the student and teacher, whether or not the student likes the content area, and the number of courses taken with that instructor. Evaluators



Dr. Catherine McClellan

may respond with what they believe the receiving institutions want to hear, rather than their actual opinions. And teachers are not consistent in their ratings of students: some are lenient and some more demanding. The admission officer receiving the review has no way of knowing what type of rater provided the data.

Another approach is attempting assessment of the personality traits through tasks and activities. Here, too, there are limitations. Most informative assessments of personality traits (such as creative essays, team tasks, and complex problem solving) require human scoring, a time- and resource-intensive process.

Despite the challenges, inclusion of personality characteristics in admission has begun. The GRE has added an optional component, the PPI, which is a standardized measure intended to replace letters of recommendation and asks referees to rate and comment on specific character traits of the student. Extending this type of assessment to other levels of admission evaluation has been limited by research indicating that personality trait assessments function differently in populations. This is true of age as well as other demographic traits, and that specific aspects may be differentially predictive for diverse subgroups. Research in this space is active, and more information undoubtedly will be forthcoming.

It is important to remember that although non-cognitive measures may support the selection of more diverse groups of students into institutions, they are not necessarily the sole or even the best predictors of successful academic outcomes. At present, they are an interesting and potentially useful supplement to existing measures.

A standardized test score is not the be-all and end-all defining characteristic of any human being, and it should not be treated as such. However, a test score has value, and used properly, can inform a set of decisions that are difficult and complex, making them more fair and valid by providing a common measure for all.

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Professor Emeritus of Education, University of Maryland



Jonathan E. Martin, Book Club September 20, 3:15-4:30 pm Read one or more of the books referenced in this special report. Come

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