

Beyond . . . Cognitive Testing

b.

BY GAIL TYSON

How do we assess leadership potential? Which factors best predict management success? Can we identify traits of skillful problem solvers? To answer these questions, corporations can turn to consultants for a sophisticated array of measurements that go beyond cognitive skills and behavioral assessments. Can graduate schools of business adapt such tools to measure the scope of applicants' abilities or produce the most successful candidates for the marketplace? To examine this issue, *Selections* visited with corporate and admissions professionals who are exploring this new frontier.

**Think of intelligence as
a mosaic, not a ladder—
a mosaic with many,
many ingredients.**

Derek Leebaert, CEO,
Intellicue, Inc.

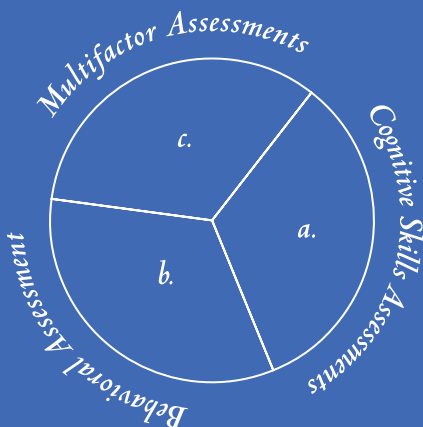


Robert Sternberg's 1997 book about intelligence describes success as an amalgam of analytic, creative, and practical abilities. When Jeanne Wilt of the University of Michigan Business School read the book, *Successful Intelligence: How Practical and Creative Intelligence Determine Success in Life* (Dutton Plume), she immediately saw its relevance to assessing MBA students.

"The GMAT is a valid predictor, but people can take it a second time and have enormous difference in scores," says Wilt, assistant dean of admissions and career development. (The average gain on GMAT total score from two-time test takers is 30.3 points, based on average results of those who took the test between July 1999 and June 2001.) "You also have disparity in scores by gender, race, and nationality. Additionally, interviewing is one of the most inexact sciences. Sternberg offered a more rigorous assessment as a complement to the GMAT."

In November 2001, the University of Michigan Business School released the results of research conducted by Sternberg and Jennifer Hedlund. Using two kinds of problems—case-based and situational judgment—they evaluated the responses for quality rather than correctness.

Pieces of the Assessment Puzzle



The most popular assessments fall into three categories, each of which assesses different aspects of ability and aptitude. Schools and companies are already using, developing, or adapting these kinds of assessments.

- **Cognitive skills assessment**, e.g., the GMAT—assesses analytical writing, quantitative, and verbal ability. It also shows how well candidates might interpret numerical data and communicate in writing.
- **Behavioral assessment**—reflects candidates' habits and tendencies and gives insight into how they respond to situations in the workplace. This form of assessment prevails throughout U.S. industry.
- **Multifactor assessment**, e.g., Test of Practical Intelligence, Structure of Intellect—looks at how an individual processes information and adapts to real-world environments to gauge how that person will solve problems, learn, make judgments, and take initiative in new circumstances.

Sternberg and Hedlund say their findings suggest that these formats can measure unique abilities not tapped by traditional assessments and can predict successful workplace performance. They contend that their assessment model, called the Successful Intelligence Assessment, produces less gender and racial disparity than standardized tests.

They are conducting further research to determine the validity of the test. In the pilot study, three versions of the Successful Intelligence Assessment were used, each consisting of four questions—two in a case format and two in a situational judgment format. The study was conducted with 422 volunteers from an incoming class of business school students at the University of Michigan in fall 1999. Seventy-four percent of the test takers were male and 50 percent were white. The group of experts who provided the scoring rubric for the situational judgment questions is characterized in the study as 70 percent male, 80 percent white, and 80 percent U.S. citizens.

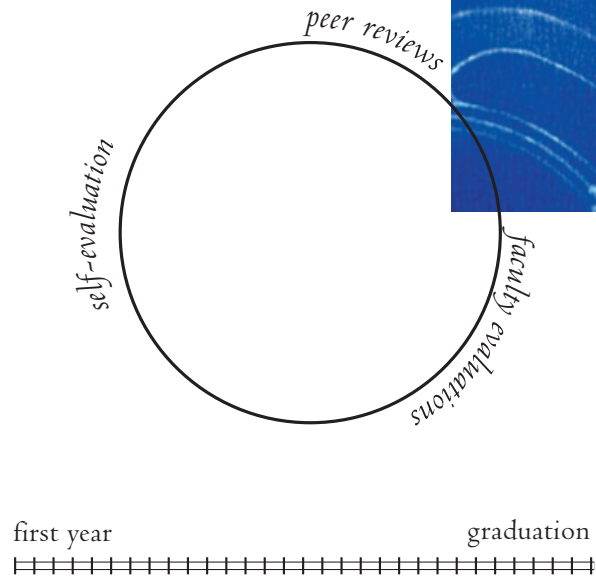
The University of Michigan is interested in broader research that would focus on the business school applicant pool.

“Kristina Nebel, our director of admissions, says it could be a way to add richer insight into students who have good but not great GMAT scores,” explains Wilt. Although she wouldn’t use the results in admissions decisions, Wilt sees the assessment as a proven complement to existing measures.

Setting Goals and Reviewing Them

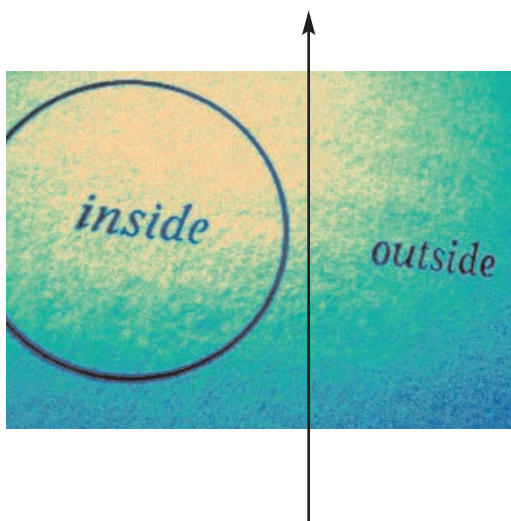
Thus far, graduate schools have used assessment mostly as a developmental tool with enrolled students. In 1991, Case Western Reserve University’s Weatherhead School of Management revised its MBA curriculum to center on managerial skills and competencies.

“This was an extremely radical change to our curriculum,” says Associate Professor Poppy McLeod, director of Weatherhead’s Leadership Assessment and Development (LEAD) program. In a first-semester course, students articulate their values, dreams, aspirations, and skills before writing a plan of development with goals, steps to achieve these goals, and a timeline. This plan can help them decide



Before students graduate, Weatherhead repeats some of the entering assessments, using a so-called 360-degree evaluation, a method that calls for views from all around—peer and faculty ratings and self-assessment. Students then review their original learning plans.

Kenan-Flagler also tests for such competencies as leadership and creativity—which corporate recruiters seek—throughout the admissions process.



how to use their time most efficiently in extracurricular activities as well as in course work.

Before students graduate, Weatherhead repeats some of the entering assessments, using a so-called 360-degree evaluation, a method that calls for views from all around—peer and faculty ratings and self-assessment. Students then review their original learning plans.

“They examine how they’ve changed, and the process sets a context to think about their future,” says McLeod. “We like to think the course offers students the technology and methodology to support lifelong learning and manage lifelong change.”

Similarly, the University of North Carolina’s Kenan-Flagler Business School is a partner with the Center for Creative Leadership in testing each MBA student for leadership abilities, using the SkillScope assessment. After the center’s initial assessment, students write personal development and action plans. Kenan-Flagler also tests for such competencies as leadership and creativity—which corporate recruiters seek—throughout the admissions process.

Other Models

Cornell University’s School of Hotel Administration established the Master of Management in Hospitality Assessment Center eight years ago. Over three days during orientation, new students participate in simulations to assess their leadership potential and communication proficiency. Students get immediate feedback from faculty and senior industry assessors, and they can elect courses that focus on speaking and writing skills and individual effectiveness in team settings.

“Students receive not only an academic viewpoint on areas they might want to improve, but a practitioner’s perspective,” says Brad Walp, director of graduate enrollment and student services. “Students who take those elective courses see the payoff as soon as their summer work experience.”

The University of Western Ontario’s Richard Ivey School of Business has used a number of assessment tools with first- and second-year MBA and executive MBA students, including the Leadership Development Report, KAI Feedback Summary, Firo Element B: Behavior, and the Myers-Briggs Type Indicator.

The Leadership Conundrum

Today's dynamic business environments make leadership more critical than ever to success—and more elusive to forecast.

“Despite a lot of research on trying to predict management success, it is still not an exact science,” says Larysa Gamula, former MBA program office director at the University of Western Ontario. “Leaders are often situational.”

“The situational approach has gone through a cycle where it wasn't so popular, but now people see its value,” says Gary Rhodes, a senior fellow at the Center for Creative Leadership. “It helps you pay attention to people you seek to manage and lead, and adopt different interpersonal strategies to be effective.”

The Center for Creative Leadership, which pioneered the use of the 360-degree tool, assesses both individuals and such organizational conditions as the factors that support or inhibit innovation.

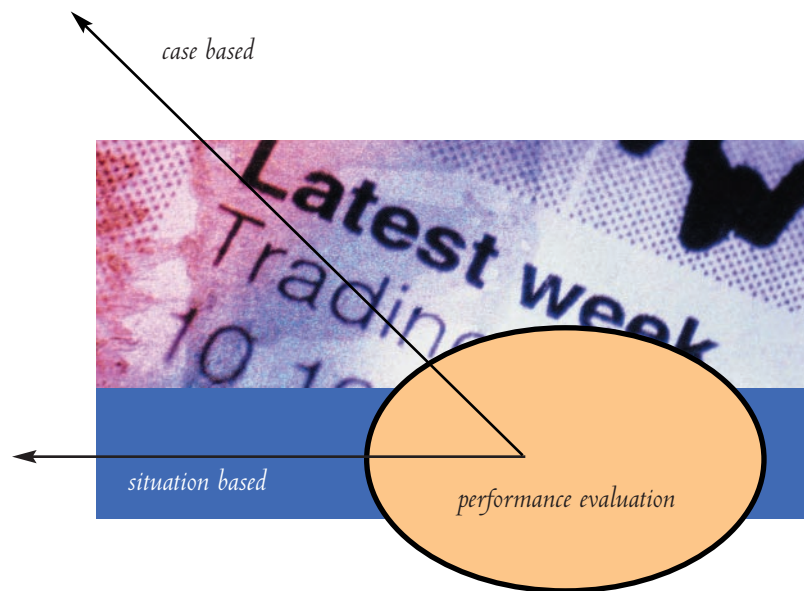
The Senn-Delaney Leadership Group, with offices in Los Angeles, New York, and London, takes a somewhat different approach: It assesses how people go about their work rather than what they accomplish.

“The ‘whats’ are just the greens fees for getting on the course,” says Peter Levin, director of business development. “Look at customer satisfaction. The relationship—the ‘hows’—determine whether a client will stay with a supplier.”

Traditional forms of assessment, like the Myers-Briggs Type Indicator and 360-degree feedback, tend to measure where a leader is now. Yet the pace of change has increased the demand for predictive measures. How an employee might lead in a future position or situation has become vital to team development and succession planning, both for in-house and outside talent.

Levin says that many successful business leaders fail when they go into government because success factors there—creating public perception, working the system—are more important than the corporate value of driving results.

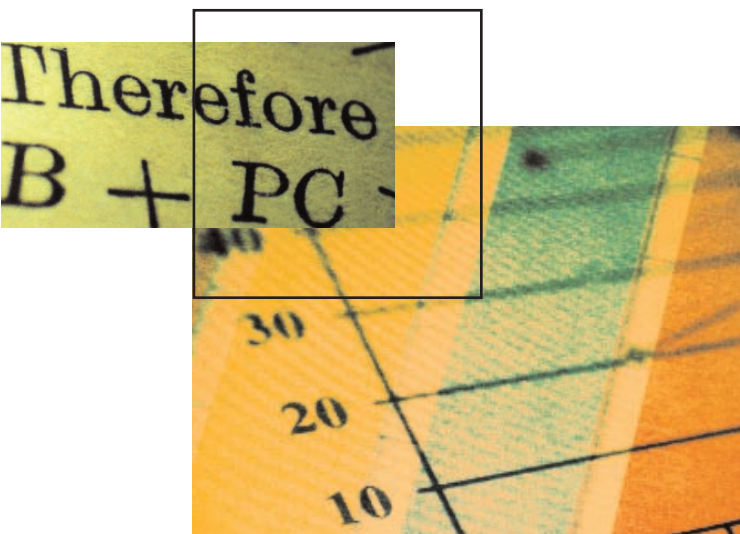
“There is no question in my mind,” he says, “that successful leadership boils down to situation-specific capabilities.”



The University of Western Ontario's Richard Ivey School of Business has used a number of assessment tools with first- and second-year MBA and executive MBA students, including the Leadership Development Report, KAI Feedback Summary, Firo Element B: Behavior, and the Myers-Briggs Type Indicator.

You could develop a template for the characteristics of a successful student in qualitative ways that would be used in conjunction with quantitative measures.

*Peter Levin,
director of business development,
Senn-Delaney Leadership Group*



Impact on Graduate Business Schools

Many business school admissions offices are moving away from strictly résumé-based interviews toward behavioral interviews of applicants. What more could schools do to assemble classes of high-potential leaders? Administratively, they could require assessing the leadership of the faculty.

“Higher education is in a transitional stage now in terms of what people are looking for from faculty,” Levin says. “Traditionally you were rewarded for research you did. Now we tell faculty members we also want them to produce successful business leaders. That requires a different mechanism for reward.”

Levin also recognizes what every admissions officer knows: Each individual student and each class of students helps to determine and fulfill the mission of a school.

“Particularly in many private institutions, the values students have as well as behaviors become important in terms of branding,” he says. “You could develop a template for the characteristics of a successful student in qualitative ways that would be used in conjunction with quantitative measures.”

Derek Leebaert, CEO of Intellicue, an assessment firm outside Washington, D.C., believes assessments must go beyond skills and behavior to determine how people think. The company offers online tools to help businesses, educators, and other individuals improve or streamline decision making, teaching and learning, and goal setting. Their assessments draw on the work of J.P. Guilford, former president of the American Psychological Association, who developed the Structure of Intellect assessment for the U.S. Department of Defense to map an individual’s range of competencies.

“We’ve built our approach on the Structure of Intellect model. It was originally developed to identify and train fighter pilots who can not just fly but ‘wear the plane,’” says Leebaert. “Learning to identify top-flight leaders, you look for someone who can ‘wear the plane.’”

In a corporate setting, such an assessment is often used as a basis for in-depth questioning during recruiting.

“You never want to use it as a gatekeeper,” says Leebaert. “You want to use it as a way to ask better, deeper questions and make more informed decisions.”

Walp of Cornell feels that such assessments may be best used as educational tools. “I’m not convinced there are a lot more assessment tools out there that would help us in admissions, as compared to those we could incorporate into the program to make students more competitive [in the hiring market].”

The Global Perspective

Johanna Hellborg, admissions manager of INSEAD's MBA program, uses a "classical" assessment process, including applicant interviews conducted by alumni around the world. She does not foresee the wide use of behavioral assessment tools with candidates in the near future.

"Because of the diversity of our applicant pool, it is difficult to make these tools applicable to all cultures," says Hellborg. "These tests can be very interesting, but they would be difficult to implement worldwide."

That kind of concern spurred the Graduate Management Admission Council (GMAC) to sponsor a validity study of students from different cultures admitted to European MBA programs. The results of the study supported the use of the GMAT across cultural groups.

There are, however, language differences that affect performance on assessments.

"As business schools grew throughout Central and South America, they sought resources for assistance with the selection process," says Frederic McHale, GMAC's senior vice president for assessment and research. "IESE in Barcelona had a Spanish assessment similar to the GMAT that they used for native Spanish speakers. Several of the new programs in Spanish-speaking countries sought their help and, in turn, IESE raised the possibility with GMAC for offering a Spanish assessment in a broad way."

McHale estimates that the resulting assessment tool, which GMAC began to develop in September 2001, will be completed in 2003. Faculty members from different countries throughout the Spanish-speaking world, as well as Spanish-speaking teachers in the United States, are currently constructing new questions to measure reasoning ability in Spanish. The GMAC expects that each year, approximately 10,000 people worldwide will take the test.



Growing interest in assessment tools raises concern from those who feel that valuable learning time is lost when time is devoted to assessment. This concern can be well founded if the assessment tools are not an integral part of learning.

Beyond Cognitive Testing to Personal Development

Growing interest in assessment tools raises concern from those who feel that valuable learning time is lost when time is devoted to assessment. This concern can be well founded if the assessment tools are not an integral part of learning.

The goal of using the cognitive, behavioral, and multi-factor assessments described in this article is to facilitate individual learning and development—not merely to evaluate an individual's skill or ability at a given point in time. The best assessment tools assist people in learning about themselves and developing new awareness and new skills.//

Gail Tyson, a frequent contributor to Selections and the Graduate Management Admission Council's Graduate Management News online, also writes about health care.