INSIDE HIGHER ED

A selection of *Inside Higher Ed* articles and essays
on student retention,
July 2013

The Retention Agenda

ETS SuccessNavigator™

ETS on helping students succeed

Colleges and universities face daunting challenges to ensure students stay in school and earn their degrees. Nationally, a staggering 44 percent of students who start four-year degrees do not graduate within six years and 71 percent of those who start two-year degrees do not graduate within three years.*
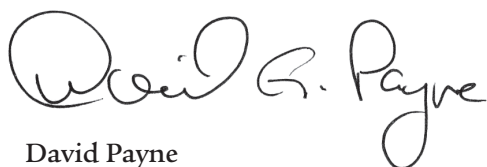
Educational Testing Service (ETS), a leader in higher education assessment, is committed to supporting you in your efforts to break down the barriers that prevent students from achieving their educational goals. We've collaborated with *Inside Higher Ed* to bring you articles and essays covering many of the complex issues surrounding retention and the importance of assessing noncognitive skills to improve retention rates.

We understand that colleges need a holistic view of the critical factors that most greatly influence student success — and that identifying at-risk students takes more than grades and test scores. Our extensive research shows that noncognitive skills — those attributes, qualities and behaviors that go unreported in standardized academic tests — also have an impact on whether a student will persist to graduation.

That is why ETS is introducing a new online tool to measure these critical factors — academic skills, commitment, self-management and social support. When integrated with traditional cognitive placement exams, the *SuccessNavigator*™ assessment provides a holistic view of incoming students that enables advisors to target intervention and remediation efforts and accelerate placement into credit-bearing courses.

We hope these articles and essays by respected experts provide you with a greater understanding of why students drop out and, most important, how to reach vulnerable students and help them succeed.

Sincerely,

David Payne
Vice President and Chief Operating Officer
Higher Education Division
ETS

* *Source: Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century, Pathways to Prosperity Project, Harvard Graduate School of Education, February 2011.*

For more information on the *SuccessNavigator* assessment, **visit ets.org/successnavigator**.

Introduction

For much of the history of American higher education, the idea that many students would drop out was simply accepted as a given. And drop out they did.

In the last five years, however, higher education has seen a dramatic attitude shift and, today, many colleges no longer view it as acceptable to have large numbers (in many cases majorities) of students fail to complete programs.

Why the change? It would be hard to pinpoint any one reason. But a consensus has emerged among the Obama administration, Republican and Democratic governors and key foundations that a crucial part of American efforts to create a better educated populace is through guiding those who start a higher education to finish a certificate or a degree. At the same time, many colleges' leaders have realized that demographic shifts mean that higher education can no longer count on enrolling only those who are well prepared for college. Increasingly, colleges are going to be filling classes with students who didn't necessarily have a great high school education. Budgets are more likely to be balanced – and educational missions fulfilled – if these students have a real chance at completion.

One result of the increased emphasis on retention has been a renewed focus on how to identify students who need more assistance, and how to get them the help they need to succeed. Techniques being used include better analysis of high school transcripts, testing, and placement counseling. Many experts agree that refining these techniques will be crucial to improving retention and graduation rates.

The pages that follow feature news articles and essays on the strategies colleges are trying – particularly at getting the right assistance to the right students. We look forward to continuing to track progress on these issues.

Do you have ideas about programs that deserve attention, or new issues that need addressing? Or reactions to this compilation of articles? E-mail editor@insidehighered.com

News

A selection of articles by *Inside Higher Ed* reporters on retention issues

The 100-Day Completion Agenda

Aiming to create visible, incremental progress toward longer-term enrollment and graduation goals,
a SUNY community college is moving ahead with numerous short-term deadlines.

By Mitch Smith

By the time today's infants are teenagers, the Lumina Foundation wants 60 percent of Americans to have higher education degrees or certificates. A noble goal, most agree, but one that won't be met next week.

College strategic plans – generally titled "Vision (Insert Far-Off Year Here)" – set similar long-term objectives aiming to advance the completion agenda, add lab space or increase diversity. But progress is measured in years and decades, sometimes frustrating those laboring on the ground and seeing little day-to-day change. And for many community colleges, those goals involve huge gains in completion rates and many other measures -- gains that would be impossible to achieve in a year or two.

A two-year college serving the Rochester, N.Y., area might have a solution.

Monroe Community College has its own set of long-term aspirations, but has also started a series of modest but tangible 100-day projects to improve the college. The first task: streamline the application and enrollment process so that prospective students have to create one password instead of three.

No one is suggesting that institutions scrap their strategic plans. In fact, Monroe President Anne Kress sees the low-cost, incremental projects as a way to make progress toward those more ambitious goals.

"There are so many big-picture ideas we're all working on," she said. "We're trying to improve our completion numbers, we're trying to improve retention. When we looked at 100 Days to Innovation, we thought this would be perfect because it gives us a timeframe and it makes us think about these much bigger-picture ideas."

Monroe's provost pushed the idea last fall after hearing about it at a College Board meeting. Other administrators signed on and began considering which project to tackle first. Ideas had to either directly support Monroe's new strategic plan or advance the completion agenda.

College leaders selected the cumbersome application process, which requires prospective students to create three different passwords before they're able to enroll, as the first project. While the password repetition makes some sense for administrative and security purposes, Kress said it frustrates prospective students who can't remember which password is for which process. It's also burdensome for college employees who have to track down a confused applicant's lost login information.

She fears some prospective students ultimately abandon their plans to attend Monroe out of frustration with the passwords, thus hampering the college's goal to expand its reach and enrollment.

Now a team of employees is trying to figure out how to let students apply with only one phrase to remember. Led by Jeffrey Bartkovich, vice president of educational technology services, the team checks in with progress reports every 25 days and is on pace to have the process implemented when Day 100 rolls.

The idea has had unexpected benefits. Administrators who are typically removed from the mechanics of the application process are learning about problems, Kress said, and staff members are seeing concrete ways

in which they're helping advance Monroe's goals. And 100 days isn't that long, so officials can't just have meeting after meeting without getting things done.

But the project wasn't as easy as it may sound. It's required cross-checks with departments across the college to make sure any changes wouldn't make their lives harder, and twice-weekly meetings with campus leaders. Bartkovich plans to unveil a proposal in the coming days – giving employees and students a chance to weigh in with enough time to make adjustments before the Day 100 deadline.

"It took us all by surprise how complex this was and that this was an entire institutional process," Bartkovich said.

Monroe will select another 100-day project this summer, and one possibility is already in the works. The college wants to offer a one-credit class through community organizations designed to expose adults to college. By working with the Urban League or YWCA, Kress hopes to enroll nontraditional students who might have never pursued higher education but are intrigued by a program Monroe offers.

Specific projects like the password simplification or working with community groups, Kress said, are going to help Monroe achieve its longer-term plans.

"You have a strategic goal that says you need to improve institutional effectiveness and accountability. Everyone's going to say that," she said.

"But what does that mean, and how do you break that down to a micro level? Otherwise it's like throwing spaghetti against a wall and hoping something sticks and something improves." ∎

'Redshirting' in Engineering

U. of Colorado at Boulder pioneered idea of giving some students an extra year, and now other universities are adopting the model.

By Zack Budryk

Following the success of academic "redshirting" -- derived from an athletic term for delaying participation to improve readiness -- at the College of Engineering and Applied Science at the University of Colorado at Boulder, other universities are adopting the model.

Boulder's GoldShirt program, which began in 2009, identifies high school graduates who need time to catch up on math, science and humanities courses before proceeding to the full undergraduate engineering curriculum. As part of the five-year curriculum, students spend their first year with an eye toward preparation for the

major before proceeding to the typical engineering courses.

Tanya Ennis, director of the program, said in an interview that the GoldShirt program promotes diversity and helps the engineering program admit some students it would otherwise have to reject. "We had students that were applying, but weren't getting in," Ennis said. "There were a few people [who said] 'What if we had a place to bring students in to develop them in the first year?' kind of like the athletic redshirt program."

Students within the program take a combination of classes specifically for them and regular courses with

students in the College of Engineering and Applied Science; Ennis noted that the program was "moving to more of a model where they're included in [more] mainstream courses."

At the end of the fall semester, Ennis added, GoldShirt will see its first graduate, who will be finishing the program in only 4.5 years and graduating summa cum laude. Retention rates for those in the program are similar to those of the engineering college's other students.

GoldShirt's recruitment pool is drawn from unsuccessful applicants to the College of Engineering and Applied Science, through an interview process in collaboration with the admissions office. GoldShirt students are also awarded a renewable scholarship of $2,500 a year, designed to help offset the costs of an additional year of college. Ennis said that GoldShirt classes are typically around 32 students, and that "this year will be

our largest class at 34."

With an eye on GoldShirt's success, the University of Washington and Washington State University have announced that they will be collaborating on their own respective redshirting programs, both under the banner of the Washington State Academic RedShirts (STARS) in Engineering Program. STARS is funded by a National Science Foundation grant as part of an effort to increase retention rates within engineering and computer science programs. Eve Riskin, associate dean of engineering at the University of Washington, said that the program had a ready-made recruitment pool in the university's Mathematics Academy. In this program, rising high school seniors live on campus for a month and receive intensive math instruction. Underrepresented minorities are specifically targeted for the program.

"We were thinking this one month would be enough and everyone would do well and live happily ever after but some students … have struggled," Riskin said in an interview. "That's why we wished we had more time … with the students."

Part of the problem for low-income engineering majors, Riskin said, is that "[i]f you're at an underserved high school, there's a lot of focus on helping the kids graduate … you can get all As [at an underserved school] and then you come here and you're in for a big shock." This is particularly problematic for engineering, since

"there's a lot of emphasis placed in engineering on how they do in the first couple of quarters." According to the American Society for Engineering Education, as many as 50 engineering majors drop out

Boulder's Tanya Ennis works with students.

or switch majors, and like Riskin, the ASEE's research cites difficult curriculum as one of the most common reasons for this.

This "make-or-break" aspect of the first year of engineering is also the rationale for the extra year, Riskin said. "There's always been this idea about the 'weed-out' courses," she said. "People just assume that those define whether or not you can be an engineer based on your grade in there."

As a result, Riskin said, many students who have great potential as engineers are overlooked. "If we find people from underserved backgrounds or challenging circumstances who succeeded despite their lack of privilege when we put them in an engineering context that supports them, they can go on and be fabulous engineers," she said.

"The traditional stereotypical engineering image is not necessarily appealing to everybody, so what we do is… talk about [how] engineers are creative problem-solvers… they make

a world of difference… and we know for a lot of our different populations, those messages resound with them," Ennis said. "I think that brings in a whole different kind of student."

Riskin said she hoped that underrepresented minority students would make up half of STARS enrollees. "We want students who are highly motivated, excited about engineering, who could just use that extra support," she added.

"[Students] have totally bought into what it means to mentor and how to help students become more successful by learning from what their experiences have been," Ennis said.

"I think [redshirting in engineering programs] has very high potential as it builds on a proven academic model and also incorporates psycho-social components that also have demonstrated effectiveness," said Norman Fortenberry of the American Society for Engineering Education. "I think the model is broadly applicable beyond… where it currently exists." ∎

Ed Tech and the Establishment

Community colleges talk up promise of free and self-paced
online course content at two-year-college group's annual meeting.

By Paul Fain

SAN FRANCISCO – Community college leaders haven't exactly jumped on the "disruption" bandwagon. That may be understandable given the popular narrative that digital innovation will replace faculty members and even entire colleges. But the two-year sector's wariness seems to be fading, if the annual convention of the American Association of Community Colleges is any indication.

The group's 2013 conference, held in this tech-friendly city, featured many sessions on how budget-strapped colleges can use self-paced online courses and free digital content, such as massive open online courses, to boost efficiency and serve more students.

Helping to set the tone was Salman Khan, founder of the Khan Academy, who gave the opening keynote speech. About six million people around the world watch Khan's free online tutorials each month.

Khan thinks his nonprofit website can help community colleges, which he said are in the academy's "sweet spot." And he views community colleges as potential allies rather than competition.

"We'd love to work with any of you," said Khan, apparently broaching the suggestion for the first time.

The two-year sector is open to that idea, said Walter G. Bumphus, the association's president. Bumphus later told the meeting's attendees that he and fellow leaders of the association talked with Khan backstage about possible collaborations, and discussed setting up a committee to consider how to use the academy's material.

"It's going to be good for community colleges and good for AACC," Bumphus said.

Khan's presentation made the case for competency-based learning that is self-paced and backed by data analytics. That approach has gained plenty of support of late. But so far, relatively few community colleges have tried it.

For many students, a sticking point in moving forward in their studies may be a single concept, Khan said. Unlike traditional lectures, his online tutorials can be watched many times – 30 times for some students, who are then able keep pace with or even surpass their peers.

The Khan Academy shouldn't replace brick-and-mortar classrooms at community colleges, Khan said. But two-year colleges could use free online material to help students, perhaps those with remedial needs, he said. Remedial courses are a black hole in American higher education, from which relatively few students emerge.

"If we let students work at their own pace," he said, "big jumps" in achievement are possible.

Homegrown Open Source

Some community colleges have created their own open-source content that is geared to remedial courses.

Bossier Parish Community College, for example, this year began offering free, online study guides to its students. The coursework is tied to developmental grammar, and is broken into discrete concepts, said Allison Martin, director of institutional effectiveness initiatives at the college, during a session here.

For example, the web-based material includes tabs for major concepts, like subject-verb agreement. That way students can skip what they know and focus on what they need to learn, retaking quizzes many times if necessary.

"They don't want to have to track all the way through some tutorial to find their weakness," said Martin.

The Louisiana college's goal is for students to use the guides to prepare for placement tests or in "tandem with their for-credit courses" in remedial tracks. The material's creation costs were manageable, Martin said. And she predicted they will be recouped in savings through improved student retention rates.

"They don't want to have to track all the way through some tutorial to find their weakness."

Bossier Parrish enrolls about 8,000 students. But it's growing fast, and is projected to enroll 10,000 next year. That's part of why the college has turned to online learning, said Martin.

"We don't have any classroom space," she said.

MOOC as Study Guide

Wake Tech Community College is among several two-year institutions that have begun using massive open online courses (MOOCs) to help meet student demand in remedial tracks.

"We thought this could be a next generation open door," said Bryan Ryan, senior vice president of curriculum education services at Wake Tech, during a panel discussion.

Last year the college, which is located in North Carolina, received a grant from the Bill and Melinda Gates Foundation to create a MOOC in remedial math. The funding was part of a group of grants to study the potential for MOOCs as remedial or introductory courses.

Wake Tech partnered with Udacity, one of the major MOOC providers, on the project. Instructors from the college designed the content, but Udacity staff members delivered it, said Laura Kalbaugh, Wake Tech's dean of academic success and transition resources. She praised the company's platform, which she said is engaging and interactive for faculty members.

The coursework is designed to be a study supplement for Wake Tech students who place into remedial math. The final product goes live next month.

"This MOOC is not going to be a replacement for any of our classes," Kalbaugh said. "It's going to be a brush up."

Technology, however, did not cooperate during the session. A Web browser loaded slowly on a projected computer display, and presenters were not able to play examples of the video tutorials.

Self-Paced for Credit

Self-paced courses can also be credit bearing, according to a panel hosted by Ivy Tech Community College, which is Indiana's statewide system.

The system last year began working with Pearson, the education technology company, to find "alternative pathways to credit," said Kara Monroe, associate vice president for academic online programs at Ivy Tech.

The Khan Academy, along with other popular websites like YouTube and Wikipedia, offer opportunities for people to learn at their own pace, said Catrina Poe, an assistant vice president at Pearson Learning Solutions. But that learning doesn't come with college credit.

Pearson has tried to change that with its Propero portal, which now includes 44 general education and introductory courses that are online and self-paced. The material is automated. Courses cost a flat fee of $299, which includes access to an e-textbook and online tutoring from Pearson.

If students successfully complete the course assessments, they can earn credit recommendations from the American Council on Education. Roughly 2,000 of the nation's 3,500 colleges issue credit based on the council's recommendations. The courses take an average of about 12 weeks to finish. But students can work faster, or slower.

Ivy Tech was one of Propero's first partners. The colleges in the Indiana community college system issue credits for the courses based on challenge exams, which students take to demonstrate their mastery of required learning in a course equivalent. Ivy Tech students can take College Level Examination Program (CLEP) exams to earn credit for four Propero courses. The college suggests those courses as an option for some students.

"It's not for everybody," Poe said. "It's for some of your students." ∎

Working Hard for Results

Carnegie Foundation's remedial math redesign shows big gains
but no simple answers to one of higher education's toughest challenges.

By Paul Fain

Improving remedial math won't be easy. But a complex redesign from the Carnegie Foundation for the Advancement of Teaching is showing solid early returns.

The foundation's Community College Pathways Program uses research to shape a new approach to teaching developmental mathematics, which is one of higher education's biggest stumbling blocks. The program features intense collaboration between professors and students and a focus on professional development for remedial math faculty members. The result is a far cry from passive lectures of either the online or traditional classroom varieties.

In a report released in March 2013, Carnegie tracked the performance of an initial group of 1,133 students in one of its two remedial math programs, which is dubbed Statway. The students were enrolled last year at 19 community colleges and two state universities in five states. Slightly more than half (51 percent) of the group completed the one-year track, which includes college-level work for which the students earned credit.

In contrast, only 6 percent of students in remedial math courses at those same institutions earned credits in college-level math in one year. And that number only rose to 24 percent after four years.

"Statway colleges have tripled the success rate in half the time," said Anthony S. Bryk, Carnegie's president.

The program didn't cherry-pick its sample, either. Roughly three-quarters of students in the Carnegie cohort placed at least two levels below college-level math. More than half

were black or Hispanic, most were first-generation college students and 45 percent grew up in an environment where a language other than English was spoken.

Carnegie researchers are confident about even better results for the new program, which they plan to expand to other colleges and more students.

"We expect to be able to move the target further," said Bryk. "This is just the first step."

Holistic and Intensive

The project features two relatively straightforward remedial pathways that take one year to complete. Both include face-to-face and online learning. They replace the "maze of possible course options" that is typical of remedial math at most colleges, and which can take as long as two years or more to finish. And the Carnegie pathways include college credit at the end.

The second of the two, which is called Quantway, is being attempted at eight community colleges. But those students began last spring, so the data are incomplete.

Both approaches emphasize teaching mathematical concepts in ways that students can apply to real-life situations. The goal is to make clear the connections between math and ideas and statistical facts, according to the report, rather than focusing primarily on procedural competence.

"No more rote memorization of seemingly meaningless concepts," said Karon Klipple, Statway's director.

For example, an instructor might

Students Placed in Remedial Math Who Earned Credit for College-Level Course In One Year
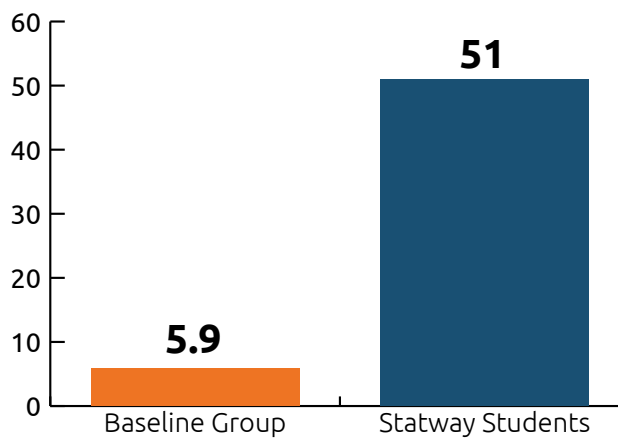
teach algebraic equations by having students calculate a car's speed, using tangible variables like air friction instead of the abstract X, Y and Z. Or students might use consumer ratings of the ingredients in cereals to illustrate linear formulas.

There is a holistic feel to the program. Math sometimes cannot be taught in isolation, the report said. So the pathways include language and literacy components, which are woven into instructional material and classroom activities.

Another key to the approach is that students bring their own knowledge and experience to a collaborative learning experience with their professors and peers. And as in the modular style of remedial course, the instructor is more of a facilitator than a lecturer, Klipple said.

Statway is intensive for both faculty and students. To succeed a student must spend four to five hours a week on the work, Carnegie researchers said. And instructors must constantly

hone their teaching style, using data to inform the process.

Hunter Boylan, director of the National Center for Developmental Education, praised the Carnegie program for its emphasis on the professional development of math instructors. That has long lagged, he said, particularly among remedial math faculty.

Boylan, who sits on the program's board, also said the pathways were designed using solid research about what works in remediation. "People are systematically being taught how to teach math in an effective way," he said.

For Carnegie's remedial reboot to have a significant impact, however, Boylan said that four-year institutions would need to honor transfer credits students earn for the last part of the one-year program. Whether most will is unclear.

"Universities have to accept those credits in lieu of college math for this to work," said Boylan.   ∎

Redefining College-Ready

Long Beach City College and South Texas College work with local high schools to prevent students from falling into the quagmire of remedial courses, and placement tests alone aren't the answer.

By Paul Fain

The growing crisis of students arriving at college unprepared to do college-level work has led to plenty of finger-pointing between high school and college educators. But two community colleges have learned that better collaboration with local high schools may be the best way to dramatically reduce the number of students who fall into the quagmire of remedial coursework.

Long Beach City College has worked closely with the Long Beach Unified School District so it can experiment with using high school grades to help determine whether incoming students have remedial needs -- a shift from instead relying heavily on standardized placement tests. And according to newly available data from the college, an initial group of 1,000 students from

Long Beach high schools who were placed with this new method were far more likely to take and pass credit-bearing, transfer-level courses at the college than their peers the previous year.

For example, 53 percent of the group took transfer-level English courses in their first semester, while only 5.5 percent of students from the same high school district took the courses the previous year – meaning they were 10 times more likely to jump directly into credit-bearing English. And their passage rate of 62 percent was roughly the same as the college's typical passage rate in English.

Fully 60 percent of the students in the program, which is dubbed "Promise Pathways," placed into transfer-level English courses, compared to 11

percent of the college's overall student population.

Complete College America, which has been a vocal advocate for remedial reforms around the country, applauded Long Beach City College for its "comprehensive and thoughtful" approach to determining the readiness of new students.

"Their impressive results should add urgency to efforts to end badly broken placement practices that condemn students to college futures based on high-stakes tests for which they have little preparation," said Tom Sugar, senior vice-president for Complete College America, in an e-mail.

South Texas College has taken a different route, but with similarly impressive results. The college, which is located in the border town of McAllen and, like Long Beach City College, serves large numbers of Hispanic students. It has among the most developed ties to local high schools of any community college in the nation. (Achieving the Dream last week honored the college for those initiatives.) South Texas has dual enrollment programs in place at 68 partner high schools, with a total dual enrollment of 12,000 students in 2012. Many of those students arrive at South Texas or other colleges with credits that count toward associate degrees.

Dual enrollment, an approach that President Obama lauded in his State of the Union speech in January, is one of several ways South Texas has tried to boost the college preparedness of high school students, including pre-college counseling, academic

camps, early college high schools and scholarship programs. But dual enrollment is the most extensive, and perhaps most appealing to students and their families, as the college waives tuition for participants.

Taken together, the high school partnerships have helped drive down remedial placement rates to 17 percent, an extremely low number for a college that serves a largely lower-income, first-generation college population. The remedial placement rate has dropped by 45 percent since 2004, and Shirley A. Reed, the college's president, credits dual enrollment as being a big part of that improvement.

"The high schools have accepted responsibility for college readiness," Reed said. "Now we share in the responsibility."

Building Trust

While community colleges and high schools joining forces to prevent students from falling into the remedial trap may sound like a no brainer, it's hardly the norm. But many community college leaders say failing to collaborate with K-12 is no longer an option.

Even so, the work isn't easy. Officials at South Texas and Long Beach said it takes years to build trust between educators on both sides, and that improving the transition to college is more involved than it looks

Take Long Beach City College's use of high school transcripts, which are a key part of the application haul admissions reps sort through every

Percentage of Students Enrolled at South Texas College in Developmental Coursework
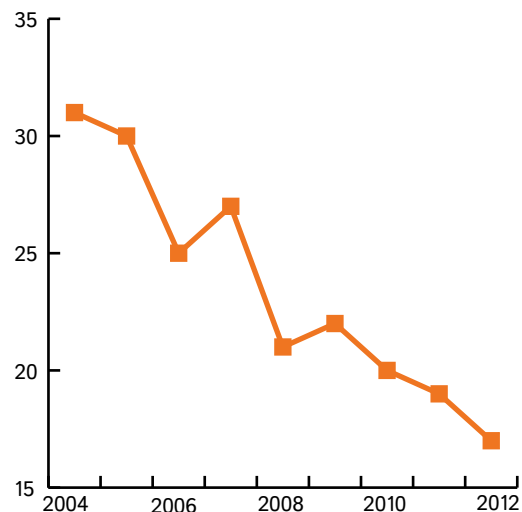
year at selective, four-year institutions. Open-access community colleges, however, rarely use transcripts. And the colleges lack the staffing to do so even if they wanted to.

Yet experts have increasingly pushed community colleges to look at high school performance in determining remedial needs. Research released last year by the Community College Research Center at Columbia University's Teachers College found that up to a third of students who placed into remediation because of their performance on two popular standardized tests could have passed credit-bearing courses.

So to respond to the growing call for the use of "multiple measures" in remedial placement, Long Beach City College relied on its local school district to create and transfer over easy-to-use electronic transcripts. Faculty from both sides also worked together 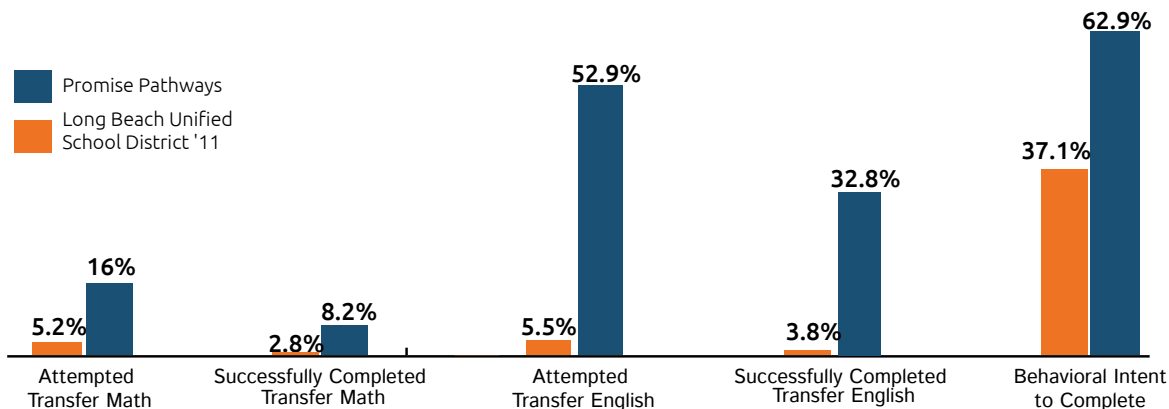to makes sure that high school courses incorporated Common Core standards and matched up with the college's curriculums. That collaboration took time to develop, said Eloy Ortiz Oakley, president of Long Beach City College.

"There's already a history of trust between faculty," Oakley said, adding that the "dialogue between higher education and K12 over the Common Core is a good place to start" in creating partnerships.

As California Goes

Long Beach also saw big jumps in the pilot group's performance in transfer-level math courses. While only 31 percent of those students placed into the courses, that's three times more than the 9 percent placement rate of their peers. The overall student population had a 7 percent placement rate. Students from the test group were also three times more likely than their peers to take credit-bearing math in their first semester (16 percent compared to 5.2 percent), and had a

Success Rates at Long Beach City College: Comparison Between Graduates of Local High School in '11 and Cohort in '12

Legend:
- Promise Pathways
- Long Beach Unified School District '11

Category	Long Beach Unified School District '11	Promise Pathways
Attempted Transfer Math	5.2%	16%
Successfully Completed Transfer Math	2.8%	8.2%
Attempted Transfer English	5.5%	52.9%
Successfully Completed Transfer English	3.8%	32.8%
Behavioral Intent to Complete	37.1%	62.9%

51 percent passage rate.

The new placement method is a "comprehensive analysis of students' high school academic records," according to the college. In addition to using broader placement criteria with 1,000 students from Long Beach high schools, the college also pushed a "prescriptive" full-time course load, which emphasized early completion of foundational skills in English, reading and math. About 85 percent of the group attended full-time, compared to 50 percent of students in their peer group the previous year.

Early returns show that these students are more likely to complete, with a finding of 63 percent showing a "behavioral intent" to get to graduation, according to college researchers, compared with 37 percent for students from the same local high schools in the previous year. They are also likely to earn credentials faster, according to the college.

Oakley said the college hopes to expand the program in coming years.

Long Beach is a good laboratory for experimentation, in part because the two-year college, school district and California State University at Long Beach exist in a more roughly contiguous, self-contained urban area than other, more sprawling and overlapping California school boundaries. The three institutions have earned plenty of praise for their close collaboration, which has resulted in a steady uptick in college-going rates for students from the K12 district, which enrolls a whopping 80,000 students.

But that doesn't mean Long Beach City College "creamed" students from the local high schools for its Promise Pathways project. Oakley said the sample had the same preparation as their peers, who are typically lower-income and among the most ethnically and racially diverse in the nation.

Even better, the group's improved performance on transfer-level courses extended across all demographics.

White students still outpaced their peers, said Oakley, but all groups improved at similar rates.

"It's part of the puzzle in closing achievement gaps," he said.

The California community college system chancellor, Brice Harris, said his office likes what it has seen of the new approach to placement at Long Beach. System researchers are studying it for possible replication at other institutions, Oakley said.

Long Beach could serve as a good example beyond California, however, given its ability to move the needle on college preparation in the face of major challenges.

And the diverse collection of students at Long Beach City College, who come from backgrounds where a college-going culture is not the norm, will soon be more common at other institutions around the country. "The rest of the nation is going to look like Southern California eventually," said Oakley. ∎

Motivation and Student Success

Source: Creative Commons / Wikimedia Commons

New study suggests that the reasons students seek a higher education can have a big impact on their grades and likelihood of staying enrolled.

By Scott Jaschik

Why did you decide to go to college?

Asking that question of new students in a more formal way might help colleges find ways to encourage more students to complete their programs, according to a new study from University of Rochester education researchers published in *The Journal of College Student Development*.

The study found that students motivated by a desire for autonomy and competence tended to earn higher grades and show a greater likelihood of persistence than did other students. (The findings were controlled for academic background and various other factors, and were based on surveys of 2,500 students at a community college and a liberal arts college that were not identified.)

The study comes at a time when many researchers are exploring the qualities that make some students more likely than others (of similar socioeconomic backgrounds and academic preparation) to succeed. Gallup researchers, for example, are reporting that students who hope they will succeed (as measured by, among other things, the ability to set goals and develop plans to achieve them) are more likely than others to succeed.

The Rochester researchers focus instead on "self-determination theory," in which the reasons students seek a college education could affect their chances of success. In several instances, the researchers found that the impact of different motivations varied by socioeconomic group.

For instance, wealthier students appeared more likely than low-income students to achieve success based on studying certain subject areas. It's not that low-income students avoid various areas of study, but they may enroll in college mainly to improve their financial situation, and that has a strong impact on their success.

Doug Guiffrida, associate professor of counseling and human development at Rochester, said this finding suggests that advisers for low-income students who prioritize economic advancement should reinforce the relationship between their studies and the likelihood of later economic success.

He said it's important to remember that "intrinsic interests matter" and can influence students' success or failure. And that influence can be negative, the study suggests.

While much previous research has suggested that students who form social connections on campus are more likely to be retained, this study found that students who place a high priority (in their decision to go to college) on meeting and interacting with peers tend to earn lower grades than do students for whom that is a lesser motivation. The negative impact is greater for males than for females.

Guiffrida said that learning which new students are focused (perhaps too focused) on meeting people can enable advisers to try to steer such students away from too much socializing. The research was conducted at the Warner School of Education at Rochester, by Guiffrida, fellow professors Martin Lynch and Andrew Wall, and a doctoral student, Darlene Abel. ∎

Beyond the Standard Essay

Oklahoma State gets ready to try a different approach to admitting undergraduates -- and to defining wisdom in new ways.

By Scott Jaschik

Throughout his career as a psychology scholar, Robert Sternberg has critiqued the limitations of standardized testing and looked for ways that colleges might identify valuable qualities that have little chance of showing up in an SAT or ACT score. He has argued that the right kind of essay prompts or project-oriented questions can reveal creativity, commitment to community and other qualities that might well merit admission to college -- even for applicants whose test scores might be a bit lower than those of others.

When Sternberg was a dean at Tufts University, he worked with admissions officials there to create such a system, and the university has found that applicants who submitted these (optional) questions were in many cases ideal candidates for admission whose best qualities might not have been visible. Last year, Sternberg became provost of Oklahoma State University. Perhaps it is not surprising, then, that his new university has just launched an experiment to apply his ideas to admissions there. Oklahoma State is currently doing a pilot test of a "Panorama" approach to admissions. (Sternberg's original project was called Rainbow, and the Tufts program is known as Kaleidoscope.)

Sternberg thinks the Oklahoma State experiment -- if successful -- could be much more significant than his prior work. Tufts is a highly competitive university in admissions, attracting an international student body from an applicant pool that is exceptionally well-prepared. That's why there was so much attention for his work there. But it's also why Tufts is not typical of the institutions most students attend.

Oklahoma State -- proudly populist -- admits 70-75 percent of applicants. Students are admitted if they meet certain criteria (a 1090 on the SAT, for instance, or if they exceed a 3.0 high school grade point average and graduate in the top third of their class). Students do answer essay questions, which tend to be more relevant for those who don't meet the minimum criteria. Questions asked have been fairly standard: "Explain any academic and/or professional goals you have established for yourself and your efforts to accomplish these goals. Please also discuss your special interests and how you have developed knowledge in these areas."

Kyle L. Wray, associate vice president of enrollment management and marketing at Oklahoma State, said that the purpose of questions like that was pretty basic. "We wanted to know: 'What's your sentence structure like? Can you put together coherent thoughts?' "

Wray said that he believes that the SAT and ACT "measure very low in terms of creativity, and only a small bandwidth of intelligence." At places like Tufts, the idea behind using nontraditional approaches to admissions has been to be sure that some of the few slots available go to those with different backgrounds and talents. At Oklahoma State, Wray said, "we're in a state that wants to produce more college graduates, so it doesn't make sense for us to reject more students. We want to identify [prospective students with] creativity in ways that standardized testing does not."

In the past few months, Wray has been consulting with high school principals and guidance counselors, and he said that they have been enthusiastic about asking different questions. "They all have stories about all those students who have artistic flair but when they sit down to take the ACT, they froze up, and because they didn't perform well on one Saturday on the SAT, they were given second or third choices on where to go to college."

Oklahoma State is having current freshmen test out a series of the Panorama questions, and the university will then select some questions to start using on applications.

Three of the questions being tested are these:

"Music spans time and culture. Explain how the lyrics of one of your favorite songs define you or your cultural experience."

"If you were able to open a local charity of your choice, what type of charity would it be, how would you draw people to your cause, and whom would it benefit?"

"Today's movies often feature superheroes and the supernatural. If you could have one superpower, what would it be, and how would you use it? Who would be your archenemy, and what would be his or her superpower?"

Sternberg said that he saw the approach of asking different questions and encouraging high schoolers to consider this path to admission as perfect for land-grant universities like Oklahoma State, and for other institutions that are focused on service to states. Oklahoma State has an "explicit mission to develop future leaders who will make a positive, meaningful and enduring difference to the world," Sternberg said. While "other kinds of institutions, of course, talk about developing leaders," at land grants "that is the charter."

While Oklahoma State has always had multiple ways to earn admission, Sternberg said that "roughly 99 percent" of admitted applicants have in the past been admitted through some combination of grades and test scores, and nothing more. "What is wrong with this picture? Well, who believes, really, that ACTs and high school grades are going to predict who will become the positive active citizens and leaders of tomorrow?" he asked. "The correlation may not be zero, but it is not going to be more than very modest."

If anyone doubts that a new approach is needed in admissions generally, he suggested thinking about the state of society. "Our society has made the serious mistake of overemphasizing analytical skills in creating social stratification, with the result that we end up with people in top positions who are very analytical but who may lack creative, practical, and most importantly, wisdom-based skills," he said.

"Look at our leaders in government and finance. How many of them would you call wise?" ∎

What is Merit?

With Supreme Court decision on affirmative action looming, admissions and legal experts debate whether and how to move beyond test scores and grades, and whether "non-cognitive" measures will yield more diversity and more successful students.

By Scott Jaschik

LOS ANGELES -- After a morning here in which admissions leaders and legal experts discussed strategies for colleges to look beyond the grades and test scores of applicants, Art Coleman said that it was time to acknowledge the "proverbial elephant in the room." That's the issue of merit.

Coleman is a lawyer who has worked with numerous colleges and higher education groups to craft admissions policies that promote diversity and can also survive legal challenges. And he is sympathetic to the strategies discussed here, and to the idea that diversity is important to higher education, and that colleges have good reason to look beyond a formula of test scores and grades. But he said that if colleges fail to talk about merit and what it means, they are likely to lose the battle (in courts and public opinion) for the way they seek to diversify their classes.

He noted that the University of Michigan won the last Supreme Court battle over affirmative action in higher education, in 2003, only to have that win "wiped out" in 2006, when Michigan voters barred the consideration of race in admissions -- the very policy for which the university built a broad coalition to back its legal case. Coleman said that the only counties that voted to preserve the consideration of race in higher education that year were those that had colleges in them. "There is a fundamental disconnect between the ivory tower and Main Street on these issues," he said.

The conference here -- "Attributes That Matter: Beyond the Usual in College Admission and Success" -- was organized by the University of Southern California Center for Enrollment Research, Policy and Practice. Presenters and those in the audience include admissions directors from institutions nationwide, along with counselors from some high schools, and the looming Supreme Court decision on the admissions policies of the University of Texas at Austin was on everyone's mind. Many fear that a decision against Texas could limit the way colleges consider race and ethnicity in admissions, and so interest was high in new strategies colleges could use to promote diversity.

Among the themes today:

• Numerous approaches exist to consider "non-cognitive attributes" that may improve the quality and diversity of the student body.

• More colleges are embracing those approaches.

• Colleges that have done so are reporting mixed experiences. And one of the examples most often cited -- Oregon State University -- is regrouping after failing to find some of the successes it was hoping for with its plan.

• The major players in standardized testing are voicing support (to a limit) for discussions of these alternative approaches, while some are also noting limitations of the approach. (The College Board was among the conference sponsors.)

• It may be easier to agree that merit is central to the debate than on what constitutes merit.

'We Need to Look at Something Else'

The conference sessions opened with William E. Sedlacek, a professor emeritus of education at the University of Maryland at College Park who is considered one of the leaders in promoting the idea that "we need to look for something else" besides grades and test scores. He described his work demonstrating that colleges can evaluate students based on qualities such as leadership, creativity, a realistic self-appraisal of skills, a sense of how to work the system, the ability to overcome adversity and others.

The audience here seemed to be in philosophical agreement with

Sedlacek; several institutions here have hired him to help with admissions strategies. But there was one point of hesitation. Sedlacek described how colleges could mix and match, taking some of his ideas for testing non-cognitive attributes but not others, using his ideas with or without standard measures and so forth -- and without having to pay him a penny. He has intentionally not sought to copyright his strategies or to have colleges pay to license them.

But he received questions about those very characteristics: Why hadn't he created a national system for evaluating students? Privately between sessions, several admissions directors who said that they agreed with Sedlacek also said that they would have a tough time adopting his ideas -- at least if they meant admitting some students with lower grades and test scores than those currently admitted. Some said they needed nationally normed systems so that they wouldn't be hurt in rankings (even if they dislike the rankings).

Many of the questions for Sedlacek were on how to "operationalize" the idea of non-cognitive measurements.

Oregon State University has been considered a leader in the field, and officials from the university have periodically credited its "Insight Resume" -- in which students respond to short questions about leadership, creativity, dealing with adversity, community service and other topics -- with attracting diverse students. For each category, an essay is read and receives a numeric score of 1 to 3 (3

being highest). The scores are assigned without regard to an applicant's other materials, so the evaluator doesn't know which applicants have great grades or are from a minority group or anything else about them.

Noah Buckley, director of admissions, described the system and also why it is no longer used as a major portion of evaluating all applicants.

A study of the first class on which the system was used (those who entered in 2004) showed great promise. with students scoring high

Jon Boeckenstedt, associate vice president for enrollment management at DePaul University

on the alternative measures showing a greater chance of being retained and graduating. But that evidence didn't last when subsequent classes were identified. Officials could not document similar impacts on retention or graduation. So Oregon State has scaled back the way it uses these tools.

The university remains "very

invested" in the idea, Buckley said. But high school grades remain the most predictive admissions criteria for all students, he said.

For students with high school grade-point averages of below 3.0 (normally a group that would be rejected), Oregon State uses the Insight Resume to identify "diamonds in the rough." For those with G.P.A.s over 3.75, the Insight Resume is a factor in deciding to whom to offer scholarships. For those in between, the system is used in large part to look for "red flags." So Buckley said some applicants' answers may indicate that they pose a safety threat. A few have indicated that they don't want to attend a diverse institution, and Buckley said they are rejected because the university's diversity suggests that they would not be a good match.

Unexpected issues have also come up. Buckley said that, over the years, some students have described overcoming child abuse. This year, the university just received such an application, but Oregon recently enacted a law that requires any state employee to report any child abuse they hear about if they come into contact with an abuse victim. Buckley said that he is not sure if an admissions application was intended to constitute "contact," or if this applicant considered the application a way to report abuse, but he said this applicant's essay may now be covered by the law.

"We're now at a fork in the road" in deciding how to use the system, he said.

Jon Boeckenstedt, who leads undergraduate admissions at DePaul University, said that institution has used a similar system, but only for those who opt not to submit the SAT or ACT. He said DePaul has numerous groups it wants to see more of at the university -- minority students to be sure, but also low-income students, first generation students and graduates of Chicago public schools.

He said that students with higher scores in DePaul's system (known as DIAMOND for Developing Insight for Admission Through the Mining of Non-traditional Data) were, on average, more likely to be retained than similar students with lower scores. And he said that the boost was evident across socioeconomic groups. So Boeckenstedt said he believes this approach does help identify diverse talent that might otherwise be missed.

But he added that the use of DIAMOND or similar measures "is not the be all and end all," and that he too believes high school grades are the best way to predict college success.

Boeckenstedt also referred to the good fortune he has to work at DePaul, where he said he has been supported (and encouraged) for using this system, even if it means some applicants are admitted with lower ACT scores than others. Unlike many admissions deans, he said, "I have never in 10 years heard a single mention from anyone about raising the test score average." But, he added, "I get lots of questions about how many freshmen are on Pell."

Calls for Consistency

Officials who were here from testing companies didn't dispute the ideas behind non-cognitive admissions approaches, but didn't embrace the trend either. Steve Kappler, assistant vice president of the ACT, said his organization's research does see patterns in student "academic behavioral readiness" in junior high school and high school, and later academic success. He said that there is evidence that students who feel connected to school, whose families are involved with school, who participate in extracurricular activities, and who see academics as a key to advancement do, on average, perform better over time.

But he said that a direct relationship can be seen between succeeding in college preparatory courses in high school, ACT scores, and freshman grades in college. When someone in the audience asked about the impact of test prep, he said, "take the core curriculum." That is the way to get higher ACT scores, he said.

Kappler also spoke about grade inflation, saying that it is so widespread in high school that high school grades are much more predictive if combined with an ACT score than examined alone.

Jim Montoya, vice president of the College Board, watched the various sessions. In an interview, he said he wasn't bothered in the least by the interest in tools that go beyond tests such as the board's SAT.

Montoya stressed that the College Board has always argued that the SAT should not be used alone, but as part of a broader admissions review. So he said it was natural for colleges to explore ways to identify talent that might not be evident from test scores or grades. He said that he heard in the questions here a desire for "a more systematic way" and for greater "consistency" in how colleges try to evaluate non-cognitive qualities.

The Law School Admissions Test was subjected to a lengthy, critical analysis by Sheldon Zedeck, a professor of psychology at the University of California at Berkeley. He described how Berkeley's law school -- concerned that the LSAT primarily identifies non-minority talent -- has been exploring qualities associated with good lawyers and ways to measure those qualities, such as analysis and reasoning, problem solving, listening, communicating, engagement and integrity.

The results so far suggest, Zedeck said, that there is a negative correlation between getting a high LSAT score and eventually having a majority of the qualities that make one a good lawyer.

Via e-mail, Wendy Margolis, a spokeswoman for the Law School Admission Council, who was not here today, said that the council has not seen "anything that suggests a negative correlation." But she added that "it has not been the LSAT's job to predict success in the profession," but rather to predict academic success in law school. She also said that it would be "very surprising if high-level

reading and verbal reasoning skills (which is what the LSAT measures) don't correlate with success as a lawyer (however that's defined)."

Defining Merit

What much of the discussion came down to was, as Coleman argued, what constitutes merit.

He said that when colleges fail to define merit in ways that can be understood and demonstrated, they lose court cases and the support of the public. For instance, he cited the University of California v. Bakke case, in which the Supreme Court in 1978 upheld the consideration of race and ethnicity, but shot down programs that set aside places for applicants from minority groups.

The University of California at Davis medical school -- whose admissions policies were at dispute -- had a rule at the time that it would not interview applicants whose college G.P.A.s were below 2.5. Yet evidence was presented in the case that Davis filled the minority slots, at times, with students with G.P.A.s as low as 2.11.

Coleman noted that those minority applicants with the low grades actually went on to become successful physicians. And he said that their success raises questions about whether the 2.5 limit was a good one. But, he said, a university can't declare as official policy that it believes that, to have merit, you must have a G.P.A. higher than 2.5 and then defend the admission of students who don't meet that criteria.

When colleges don't think through all the messages of their admissions policies, he said, "they deserve to lose" their cases -- even if their intentions are good ones. "Live by the score, die by the score," he said.

The argument put forth in just about every legal challenge to affirmative action, he said, is that merit is defined by grades and test scores. Colleges need a public discussion about why

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One researcher made the case that colleges can evaluate students based on qualities such as leadership, creativity, a realistic self-appraisal of skills, a sense of how to work the system, and the ability to overcome adversity.

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that's not the case, he said. Colleges that want to use nontraditional measures need to show that they have thought them through, he said, that they are only admitting students who can succeed, and that they have evidence linking their policies to patterns of enrollment and graduation.

College leaders need to be willing to "go out of their comfort zones" and talk not only about "the process" but about the ideals behind their quest for

diversity, he said. Medical schools, he said, have done a good job lately of reminding the public that they are admitting not just students but "future physicians," so knowing whether some may be more likely than others to embrace community medicine, or have good bedside manner, or be able to communicate to a diverse group of patients makes sense, he said.

Richard Sander, a law professor at the University of California at Los Angeles, challenged Coleman, saying that colleges and law schools that say they are using nontraditional criteria are really just admitting black and Latino applicants with lower test scores than white or Asian applicants have. He said that he doesn't oppose the consideration of nontraditional criteria, but that colleges need to apply such measures equally, not just to admit minority applicants.

But Coleman said that colleges are considering other factors, and have primarily failed to explain why. He said that if colleges had open discussions about why diversity matters, they might just gain support for considering factors beyond grades and test scores. Consider an orchestra.

A conductor holds auditions for four new musicians to join the orchestra and 30 musicians try out.

The top four -- based purely on performance -- all are oboists. Would anyone, Coleman said, expect the conductor to just take on those four? ∎

Views

A collection of essays and op-eds about retention issues

Research to Improve Retention

Colleges can identify those at risk of dropping out, and then provide services and adopt policies to keep these students enrolled.

By Robert J. Sternberg

One of the most serious problems facing colleges and universities today is that so many students leave before finishing their studies. When students drop out, it is bad for them because they lose huge future career and income potential; bad for the institution they leave because of lost reputation, revenue, and opportunity to make a difference in the students' lives; and bad for society because of the need for an educated work force that is able to compete in the global marketplace.

Although there are many reasons students drop out, 12 research-validated risk factors, often in various combinations, help account for why most students drop out. These risk factors apply at a wide variety of institutions of higher education. Here are the risk factors and the means to mitigate them.

1. Uneven formal academic knowledge and skills. The most obvious and frequently addressed issue behind dropout is academic background. At many institutions, large numbers of students enter with spotty academic backgrounds, especially in science and mathematics (STEM)

disciplines and in writing. Institutions of higher learning need counselors and tutors who seek to remediate deficiencies but also to enrich areas of strength. To pinpoint deficiencies and ensure proper placement, institutions need to move toward tests measuring specific skills and content knowledge and away from reliance on general aptitude tests, which are not very helpful in identifying specific strengths and deficiencies in knowledge and skills. Tests of general academic aptitudes only account, at most, for 25 percent of the variation in academic success in college. It therefore is a mistake to rely on them heavily for placement (or even admissions) decisions in college. In studies my collaborators and I did while I was at Yale University and then at Tufts University, studying diverse students around the country, we found that tests of broader aptitudes (creative and practical as well as analytical) could as much as double prediction of first-year college success.

Neal Schmitt and his colleagues at Michigan State University have found that biographical data significantly enhance prediction of college

success. If colleges rely too heavily on general academic aptitude scores in making placement decisions, they risk creating self-fulfilling prophecies dooming students to lesser success.

2. Lack of informal knowledge about being a college student. In any new environment, whether an academic environment or a work environment, one needs to acquire "tacit" knowledge — the informal and often unspoken keys for achieving success in that environment. For example, toward or away from which courses and advisers should one gravitate? Which kinds of student activities become unrewarding time sinks that prevent one from spending adequate time studying? How does one decide upon people with whom to hang out? How do you study for a multiple-choice versus an essay test? In research on college students, Wendy Williams and I found that acquiring informal knowledge -- "learning the ropes" -- is at least as important as learning specific formal content knowledge for success in college. Rick Wagner and I found that those with high academic abilities are not necessarily the ones with high

levels of informal knowledge, and vice versa. (Put another way, academic skills are no guarantee of common sense.) Unfortunately, in many cases, the informal knowledge with which one enters college from high school actually transfers negatively to the college environment: For example, a student may believe that the meager amount of studying he did in high school will be adequate in college, when in fact it is not.

3. Inadequate development of self-regulation skills. In high school, one often has a support network to help regulate one's time and energy. Most important for many students is close supervision by parents or concerned individuals at one's high school. In college, students often find themselves largely "on their own" for the first time in their lives. Some are able to channel their newly found freedom effectively, but others are not. They may spend too much time on extracurricular activities and too little time on studying, or they simply may channel their study time in ways that are less than effective. Edward Deci and Richard Ryan of the University of Rochester have found that those who lack an autonomous style of self-regulation — who have trouble managing themselves independently — are at risk for lack of success in a number of different kinds of environments. Moreover, Teresa Amabile of Harvard has found that students and others who have been pushed very hard by their parents, teachers, or employers, and who have become used to extrinsic rewards for

success, may have trouble motivating themselves intrinsically when immediate extrinsic rewards (parental approval, reward money, extra praise) are no longer readily available. A sufficient intervention should include a detailed analysis of how students spend (and do not spend) their time in order to determine whether their self-regulation is adequate to their needs as a college student. As an example, a tendency toward procrastination can lead students to underperform simply because they did not allow themselves enough time adequately to perform the assignments at hand.

4. Impaired self-efficacy and resilience. Some students come to college uncertain as to whether they have the ability to succeed in their college work. Other students come expecting to succeed, and then receive one or more low marks on college assignments or tests that lead them to question whether they are able to compete, after all. As their self-efficacy fails, their drive to succeed in college goes with it. Studies by Albert Bandura and his colleagues of Stanford University have found that self-efficacy is one of the best positive predictors of success in any working environment. Counselors thus need to ensure not only that students have the knowledge and skills to succeed, but also a mindset whereby they believe in their own potential to succeed. The students need further to understand that many of their peers who have an initial failure end up successful in their fields.

In my own case, I ignominiously

failed my first psychology test freshman year (with a score of 3 out of 10 points); nevertheless, 35 years later I served as president of the American Psychological Association. The resilience to get beyond disappointing setbacks is key not only in college but also in work and in life, in general. In my long career as a psychology professor, dean, and provost, I have noticed that many of my graduate-school classmates and later colleagues who never achieved the success for which they hoped lacked not ability to achieve, but rather the resilience to believe in their ability to succeed in the face of disappointing setbacks.

5. A mindset believing in fixed rather than flexible abilities. Carol Dweck of Stanford University has found that students (and others) typically have one of two mindsets — or folk conceptions — regarding their abilities. What she calls "entity theorists" believe that abilities are largely fixed; on this view, when a student makes a mistake, the student shows a lack of abilities that is potentially very embarrassing. What Dweck calls "incremental theorists," in contrast, believe that abilities are modifiable and flexible and that making mistakes is useful because it helps one to learn and, in general, to grow. Dweck has found that although both kinds of students perform roughly equally well in easy or modestly difficult courses, incremental theorists excel in challenging courses because they are unafraid of extending their skills and making mistakes along the way. Students therefore need to understand

that abilities are modifiable, that people learn through their mistakes, and that difficult but manageable challenges are good because they enable one to move ahead in one's learning.

6. Inability to delay gratification. In many college courses, students do not find out until the end whether they have achieved the level of success for which they hoped. They do not find out for four or even more years whether they will indeed get the diploma they hope for. Often, success in a particular course or in college generally seems far off, whereas there are many gratifications to be had instantly, especially in the social domain.

Some students just cannot wait that long. Walter Mischel of Columbia University, when he was at Stanford, performed experiments with young children on their ability to delay gratification — to wait for a larger reward instead of receiving an immediate smaller reward. He found that those individuals who were able to delay gratification performed better academically, many years later when they were of college age, than did children who were unable to delay gratification. In other words, parents and teachers need to work with students to help them realize that many of the best rewards in life are not immediate.

7. Impaired ethical judgment. Many students today do not have the ethical judgment that we who teach in institutions of higher learning would have hoped we would have been able to take for granted. In my own work on ethical reasoning, I have found that many of today's students do not even view as ethical issues such behaviors as cheating on tests or plagiarizing in papers. For many students, it just has become too easy to take the low road, and given the temptation, they do so. They get caught, with disastrous results for their success and sometimes longevity in college. It therefore is essential that students learn, as soon as they arrive in college, the ethical expectations of the institution. It should not be assumed that they have been taught, or at least, have learned these expectations.

8. Disengagement from the university environment. For many students, a precursor to dropping out is a progressive disengagement from, or failure ever to become engaged in, the university environment. The students simply never connect with, or become disconnected from, the environment, and hence become more and more psychologically distant and even alienated from it. Disengagement, or a failure to engage in the first place, may results from what French sociologist Emile Durkheim and later Harvard sociologist David Reisman referred to as anomie, or a breakdown in the social bonds between the individual and the community. Anomie can be a particular challenge for students whose sociocultural background is distant from that of many others in the college or university. When anomie develops, students may become more and more withdrawn until they literally withdraw from the college or university. Students should be strongly urged to actively engage in at least one extracurricular activity in order to enhance engagement with the university at large. Advisers also need to try to make sure that students stay "connected" and do not start to withdraw from the life of the university.

9. Lack of interest in courses. Often, students enter college and are eager to get on with their required courses. They may load up on distribution requirements or other courses that they need to get out of their way. But Richard Light of Harvard University has found that one of the best predictors of academic adjustment is taking, during the freshman year, at least one course solely because it is interesting, regardless of whether it is required. Students who load up too much on courses that are required but that do not interest them are at greater risk of dropping out simply because they are bored and find no relief.

10. Issues in academic trajectory. Issues in academic trajectory include either uncertain trajectory or a trajectory that is ill-matched to one's interests or skills. The late Paul

> **For the most part, colleges do and should try to retain students rather than usher them out. But there truly are some students who are better counseled out.**

Pintrich of the University of Michigan pointed out how important conscious, well-chosen goals are to motivating students to succeed. Students are likely to perform at a higher level when they feel they have some kind of academic "destination" in mind — or at least when they feel that what they are doing will lead to such a trajectory. In some cases, students simply made a poor choice, perhaps because their interests do not match their skills, or perhaps because parents or other authority figures have pushed them into a direction that does not well fit them.

11. Psychological issues. Psychological issues include a diverse range of challenges, such as substance-abuse problems, interpersonal problems with important others, and untreated or nonaccommodated psychological problems, such as learning disabilities, attentional/hyperactivity disorders, autism-spectrum disorders, and so forth. Students entering with such problems should immediately be referred to appropriate counselors and programs. Appropriate programs work. Waiting can be fatal. Such problems are always best handled, obviously, by individuals trained in the diagnosis and treatment of the problems at hand.

12. Financial concerns. I have saved for last the most challenging of the problems we all face when students are at risk for nonretention, namely, financial concerns or anxieties about financial concerns. In the end, some students drop out just because they cannot make college work for themselves financially. The financial needs of students make it imperative that colleges and universities calculate aid needs correctly. Although we know that student debt is a major problem in our society, students who graduate from college will earn, on average, 84 percent more than students who do not, so sometimes avoiding debt is penny-wise but pound-foolish.

At Oklahoma State University, we have attempted systematically to

address the problem of dropping out, especially after the first year of college, and to devise solutions that would keep students on track to earn their degrees. We have created a new center — the Learning and Student Success Opportunity (LASSO) Center — which targets students who are at risk for dropping out. All students are eligible for LASSO services, although our particular focus is on students in the first year, where the risk of nonretention is greatest.

Students are identified for LASSO services in one of several ways: (a) self-referral; (b) referral by a professor (easily done through electronic means); or (c) automatic referral either through low G.P.A., uncertainty about career trajectory, or an at-risk admissions profile. We also have other resources, such as a Mathematics Learning Success Center, a Writing Center, and college-based student-success centers, which seek to help students reach their maximum potential. Research-based efforts such as ours can help large numbers of students stay in college who might otherwise drop out.

For the most part, colleges do and should try to retain students rather than usher them out. But there truly are some students who are better counseled out. It may be that college is not, in the end, a good match for them, or that their particular college does not offer them the academic or extracurricular programs they need in order to be a good fit. In my "theory of successful intelligence," I argue that people who are successfully intelligent in their lives often first try to adapt to the environments in which they find themselves; that failing, they may try to shape the environments better to meet their needs; but if that fails as well, they may find their best option is to select another environment that is a better fit to their interests, skills, values, or needs. In the end, whatever our goals as an institution of higher learning, we ought always to be serving the students who entrust their academic careers to us. ■

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The New R&R

Worried about the finances of your academic program? It's time to take recruitment and retention seriously.

By Michael Bugeja

Many professors and even department chairs pay little heed to enrollment, believing it falls under the purview of admissions. However, enrollment plays a substantial role in professorial workload and even salary. If enrollment keeps dropping, an entire department can be put on the chopping block.

These days everyone needs a little R&R: recruitment and retention, that is.

The new emphasis on R&R has to do with money. This is not news. Everything these days has to do with budget.

In the past, when higher education was better-funded, faculty lines were replaced when people resigned or retired. Now positions typically revert to the college or university for redistribution. Because most budget models are in part entrepreneurial, those professorial positions usually are assigned to units with stable or increasing enrollment.

Loss of a position means more professors teach extra classes; moreover, the breadth of offerings may shrink as experts in subfields are not replaced. But the bill for falling enrollment doesn't stop there. Everything is affected from dining (fewer students in cafeterias) to lab

fees (someone has to pay them) to residence hall bills (too many vacant rooms).

Other fees and tuition may rise as enrollment falls.

Declining enrollment occurs for a variety of reasons. At pricey institutions, including public ones that aren't household names, the recession may be to blame. Student debt is another consideration. There are also perceptions about job opportunities in certain disciplines like mine (more on that later).

While lower enrollment affects everyone, it can have a devastating impact on the liberal arts and sciences.

At public universities, those colleges typically provide general education for other colleges, such as engineering, business and agriculture. As such, the liberal arts and sciences not only must serve their own majors but also everyone else's.

There are a couple of ways to accomplish this budgetarily. Liberal arts deans can argue for a budget model that rewards student credit hours or they can advocate curricular streamlining (e.g., eliminating sequences, pedagogical duplication, outdated courses, etc.). The savvier deans argue for both. But at institutions that count only the number of majors, liberal arts disciplines that play a key role in providing general education can end up with the short end of the stick.

Problem is, central administration controls the budget model and professors control the pedagogy. Often it is easier to persuade central administration of the service role of the liberal arts than it is to convince faculty of the benefits of streamlined curriculums.

In the short term, a budget model that rewards student credit hours means more tuition flows to the liberal arts and sciences to cover classes for other colleges. But there's a downside. If units are being rewarded for credit hours, there may be little incentive to recruit and retain their own dwindling cohorts of majors.

"Every department in every college should pay attention to recruitment and retention. Some programs have an added responsibility because their majors may find it difficult to secure employment."

The worst possible world for a liberal arts and sciences department is to provide general education for other colleges while increasing curriculums for its own majors. Not only will little attention likely be paid to recruitment and retention, but resources will be stretched to the limit to advance majors in degree programs. The result can deteriorate to five- and six-year graduation rates, mammoth gen-ed classes, and increasingly smaller major classes — some of which are canceled due to low enrollment, further delaying graduation for majors.

That scenario can spell soaring student debt, workload inequities for continuing professors and low adjunct pay for temporary employees.

Every department in every college should pay attention to recruitment and retention. Some programs have an added responsibility because their majors may find it difficult to secure employment or do so at low starting salaries, insufficient to pay off typical debt.

That's the perception these days of journalism schools like mine — and the reason we have stepped up efforts to recruit and retain as many students as possible.

For the past several years, we saw the number of our majors remain steady but discovered a trend of declining levels of pre-majors. We looked into that immediately and found that in part our requiring a rigorous English usage test had something to do with that in an age of texting. We also learned that admissions had been sending some of our possible recruits to communication studies. We addressed those problems and did more.

And to our surprise, we not only have been able to increase enrollment, we had a record year, with 131 incoming students majoring in journalism and advertising. That was an increase of 19 percent in journalism and 52 percent in advertising over the previous year, securing the highest total incoming class in the largest college at Iowa State University.

Here are some of our best practices,

easily adapted to any discipline:

1. We created prospective student informational packets for high school advisers. These included copies of award-winning student media publications along with other literature about our program, touting our near 50 percent four-year graduation rates and 97 percent placement rates within six months of commencement.

2. We created a prospective student blog with videos of our exemplary faculty, staff and alumni.

3. We sent regular e-mail blasts to prospective students, keeping them informed about student awards, financial aid, media organizations and other news of interest.

4. We created the Greenlee School Ambassador program, training and assigning our top majors to meet with prospective students and their families.

5. Our advisory council created a PowerPoint about successful journalists and advertisers from our school, which we show to all pre-majors.

6. As director, I took over our two orientation classes to help with retention efforts, letting students know how important they are to our program and helping them design four-year undergraduate plans of study to defray student debt and graduate on time.

7. We hosted ice cream socials to welcome new students to the program and give them the opportunity to interact with faculty, staff and student organizations.

8. We focused on recruitment and retention during our signature events such as our nationally recognized First Amendment Day, inviting busloads of prospective students to our celebrations.

9. We made student scholarships and internships a priority, raising more than $1 million in academic year 2011-12 in direct funding, bequests and apprenticeships with high-visibility media companies like Meredith Corporation and the Scripps Foundation.

10. We also are designing a transparency page, with vital statistics about average student loans and debt for our majors as well as updated graduation and placement rates, among other assessment data essential for students and their parents to be prudent consumers of higher education.

Perhaps our best recruitment tools are the enthusiasm of our students and alumni. Recently I polled the students in my ethics class about their journalistic passion and recruitment recommendations. You can view their responses on my class blog. We are in the process of using this in the current academic year to recruit high school students interested in media and technology.

Alumni also have an active role not only in our school but also in our institution. For instance, CNN anchor Christine Romans was enlisted to to make a promotional video.

Phil Caffrey, our director of admissions operations and policy, used my name as an example in the video to showcase a new initiative that involves sending a "Congratulations, you're admitted!" email to each undergraduate applicant approved for admission.

A similar video in the applicant's name is sent a day or two after she or he submits an online application for admission.

"We asked Christine Romans for help with this project and she really came through!" Caffrey said. "She and her colleagues at CNN volunteered their time and resources to shoot their portion of the video, and they did an incredible job.

"The video is getting rave reviews from our admitted students and their parents. In fact, a very large number of the admitted students are posting the video on Facebook for their friends and relatives to see." He added, "This project would never have happened without Christine's help!"

And success with our recruitment and retention efforts would never have happened without our focusing on the new R&R with the same intensity that we give to research, teaching and service.

You can do the same. ■

Michael Bugeja is director of the Greenlee School of Journalism and Communication at Iowa State University.

Isaac Newton and College

Newton's First Law of Motion – that momentum matters -- has lessons for those who seek to improve student college completion.

By Vincent Tinto

Newton's First Law of Motion states that an object at rest tends to stay at rest and an object in motion tends to stay in motion, and once in motion, that is when it develops momentum. It will tend to stay in motion unless acted upon by an external force.

Elucidated by Newton in 1687, the first law of motion can also be applied to study of student completion, for like objects, stud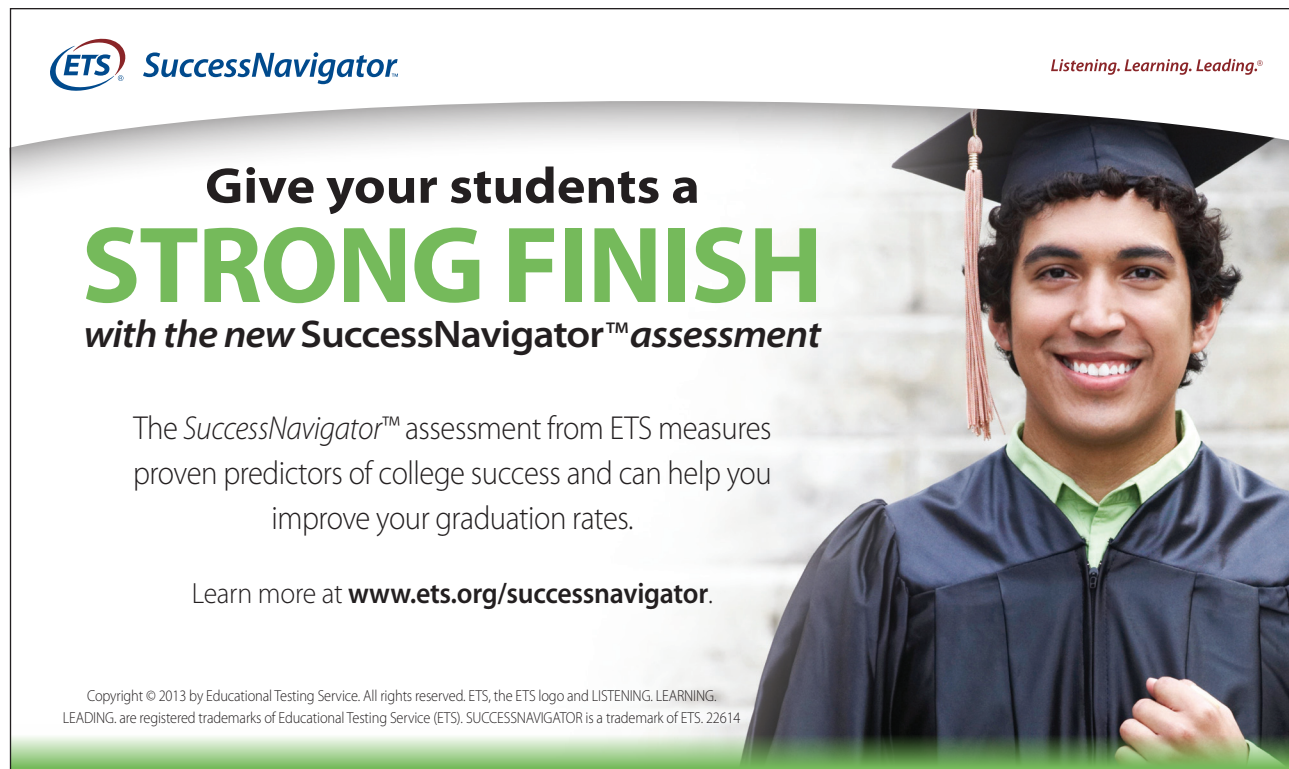ents at rest tend to stay at rest and students in motion tend to stay in motion. Once they gain momentum (that is, acquire more degree credits), they are more likely to stay in motion unless acted upon by an external force.

Gaining and maintaining momentum is key to student completion. Students who progress more quickly through the curriculum are considerably more likely to complete their degrees than those who do not.

This is but one reason why a number of states have begun to focus on the importance of student momentum to completion. The Washington State Board for Community and Technical Colleges, for instance, utilized the analysis of the transcripts of more than 87,000 first-time community and technical college students who entered the Washington system in the 2001–2 academic year to identify key points in the curriculum, referred to as momentum points or milestones, whose timely attainment was associated with student progress to degree completion.

For most institutions, these intermediate points of attainment include the successful completion of developmental coursework, the timely declaration of a major, and the earning, within a particular time

period, of a number of degree credit hours. These momentum points were then folded into the state's funding formula such that institutions are now rewarded when they improve the number of students attaining those points of intermediate achievement. Other states have or will soon follow suit with similar models of funding that center on the importance of student momentum to completion.

Identifying intermediate points of attainment is one thing. Helping students gain momentum and attain them in a timely fashion is another. Unfortunately, not all students are able to do so. Take the case of students who begin college academically under-prepared. Too many spend too much time on coursework for which they earn no college credit. It some cases it may take some students two or more years to complete basic skill requirements, if they are able to do so at all.

This is but one reason why an increasing number of colleges, such as the Community College of Baltimore County, are turning to accelerated learning programs for those students who begin just one level below college-level work. In this case, rather than being placed in a stand-alone basic skills course for which students do not earn college credit, they are placed in the college-level course to which that course would have provided entry together with a study skills course that is directly connected to that course. In this manner, students earn college credit while acquiring needed basic skills.

Similarly, colleges such as the Community College of Denver have condensed what would otherwise be a two-semester sequence of either developmental math or developmental English into one semester in their FastStart program. By adopting interactive teaching and learning strategies, contextualization of developmental coursework, and cohort-based models, they have been able to substantially increase the percentage of students who complete their developmental coursework and continue in college.

Isaac Newton
Credit: Wikimedia Commons

A number of other institutions have taken a different approach to speeding up student progress through developmental coursework by revising the way students' skill levels are assessed at entry. Tarrant County Community College, for instance, employs ALEKS and MyMathLab not only to assess student math skills but also provide students an online vehicle to address those skills that require improvement.

Rather than categorizing students into three math levels, each of which requires an individual course to address, Tarrant officials identify 15 math skill modules and ask students to take only the specific modules in which they need help. Using Computer Assisted Instruction, they have greatly accelerated students' movement through developmental math and in turn reduced institutional costs. Other institutions, such as Capital Community College and Kapi'olani Community College, have successfully employed summer bridge programs that enable underprepared students to get a head start of their first year of college and therefore move more quickly to earning college credits.

Gaining momentum toward degree completion requires that students not only earn college credits but also do so in ways that lead to degree completion. Yet many students begin college undecided or change their majors, sometimes several times. This is but one reason for the growing emphasis on intrusive first-year advising merged with career counseling. In addition to the front loading of such advising and the use of first year student success courses in which advising and counseling are embedded, as they are in Florida, a number of institutions have employed web-based solutions to help students establish career and educational goals in a timely manner.

Programs such as Valencia Community College's LifeMap and Century College's GPS LifePlan, now widely used in Minnesota, have used

such programs to increase goal setting and in turn retention and completion. Other institutions, such as Saddleback College, utilize predictive analytics to construct real-time on-line advising systems that respond directly to student advising needs as they progress through the institution.

Unfortunately, student progress is frequently constrained if not halted by the incoherent array of courses that typify most college offerings. Lacking any clear structure, students tend to wander through the curriculum in ways that undermine their ability to make timely progress. Some leave in frustration and others amass more credits than they need for program completion, that is, if they are ever able to do so.

It is for this reason that a number of colleges seeking to improve rates of completion have turned their attention to curricular structure and coherence. Under the auspices of the Bill & Melinda Gates Foundation's Completion By Design initiative, consortia of community colleges in four states -- Florida, North Carolina, Ohio, and Texas -- are working to develop coherent course pathways whose structure enable, if not require, students to move more quickly through the curriculum to the certificate or degree completion.

In these and other ways, institutions and states are coming to recognize the wisdom of Newton's First Law of Motion and the importance of student momentum to college completion. Hopefully these and other efforts will take on a life of their own and gain sufficient momentum to transform how institutions approach the task of improving college completion. ∎

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