A Success Story from ACT

Taking the Guesswork Out of College Curriculum Design
FACT: When It Comes to Student Success, Academic Behaviors Matter

Research shows that academic behaviors such as motivation, self-regulation, and social engagement are just as important to academic success in college as good grades and solid test scores.

FACT: ACT Engage® College Assessments Can Help

Using ACT Engage assessments can help at-risk students turn toward more positive academic behaviors. It also gives colleges a tool to incorporate students’ emotional needs into curricula and increase retention.

RESULTS: Turning “Educated Guesses” into Data-Informed Decisions to Help Students Succeed

“Gut feelings” about students’ academic behaviors aren’t enough, especially when a university must link course objectives to institutional learning outcomes. Faculty at this prominent health sciences university campus needed a way to link data to student progress. They found the perfect answer in systematic use of the ACT Engage College assessment.
One University’s Success Story

The University of Minnesota Rochester (UMR) takes student learning seriously. That’s a necessity for any postsecondary institution, but especially when your health sciences campus is based in the same city as the world-renowned Mayo Clinic.

UMR, founded in 2006, offers undergraduate health sciences and health professions degrees and serves hundreds of students each year. Many UMR graduates enter medical school or graduate programs in health science disciplines like chemistry, psychology, sociology, and genetic counseling.

Student learning is the main focus of UMR’s Center for Learning Innovation (CLI), made up of a highly collaborative, multidisciplinary group of faculty. The group is charged with assessing student achievement to improve curricula based on the conditions under which students learn best.

“Our philosophy is, if we’re going to design courses in this multidisciplinary unit, we want a data-driven, research-oriented curriculum design that’s sustainable,” said Dr. Robert Dunbar, associate professor at the Center for Learning Innovation. “We want to be able to demonstrate why we’re implementing these strategies and connect research to pedagogical interventions.”

Dunbar, whose doctorate is in neuroscience, has a keen interest in how student learning drives outcomes. Dunbar and his CLI colleagues conduct research not only on how students learn but why they succeed in learning. For example, Dunbar studied group work compared to individual work and which best facilitated learning. “We weren’t satisfied with the data,” he said. “I could tell which students were performing well in groups, but I couldn’t tell why. It started to frustrate me.”

That’s when faculty started to turn toward student attitudinal data—a psychosocial approach to institutional learning outcomes. The challenge was finding a way to measure students’ psychosocial skills—or academic behavioral skills—and connect data to those outcomes so the success could be duplicated in other curricula.

ACT Engage College assessments overlapped perfectly with the psychosocial skills UMR faculty hoped to measure—skills that work in tandem with students’ academic abilities to affect learning:

- Motivation
- Social engagement
- Self-regulation

“The fact that ACT Engage has predictive power for student success, shown by the research above and beyond GPA or test scores, made it a perfect fit for us.”
—Dr. Robert Dunbar, associate professor, University of Minnesota Rochester
Also, the assessment design made it easy to map course objectives to institutional learning outcomes, which shape course development at UMR. “There’s an invisible connection between what our faculty think is important and our institutional outcomes, and it was very valuable that the variables measured by ACT Engage were the variables the faculty wanted us to measure. We mapped ACT Engage scales to our institutional outcomes, and they mapped really well in those three clusters.”

Using ACT Engage results takes the guesswork out of how students learn and helps inform curricula using data rather than using guesswork on student needs.

ACT Engage College assessments are administered to UMR students each year (freshman through senior years), so CLI faculty can track their progress in relation to their academic progress. The result is a wealth of information, based entirely on demonstrated data, that faculty can use to improve courses.

ACT Engage College results help students in two ways:

**One-on-one interventions:** Advising teams work with students to intervene with potential trouble areas using ACT Engage results. For example, if a student’s scores on the self-regulation scale are low, advisors can suggest ways to reduce test anxiety or pessimism.

**Adjusting course curriculum:** UMR is looking to use assessment data to create courses that improve student engagement. For example, instructors can concentrate on the need for motivation, encouraging students to boost their enthusiasm for the class and the material it presents.

“Having ACT Engage data takes us out of the realm of faculty’s ‘gut feelings’ about student success to giving us some real data to confirm those feelings and then to design interventions in a justifiable way to help students,” Dunbar said.

Taking academic behaviors into account gives UMR a more holistic approach to shaping curricula. “We have the notion of ‘book smart,’ equated with GPA or test scores, versus ‘street smart,’ which relates to common sense or social skills,” Dunbar said. “ACT Engage is one of the only tools that puts multiple psychosocial variables together in one space.”

The university campus has embraced the use of ACT Engage, having collected a two-year bank of assessment data, and is using it to help accelerate student learning. Meanwhile, students have reacted positively to the guidance the assessment results provide. “The students understand it’s not just about getting them through school but also about skills they’ll need to prepare for careers,” Dunbar said.

**What Will Your Story Be?**

Start your success story by scheduling a consultation with an ACT Engage specialist. Complete the form at [act.org/engage/contact](http://act.org/engage/contact).

Learn more at [www.act.org/engagecollege](http://www.act.org/engagecollege)