Today, approximately 40% of U.S. students entering four-year bachelor’s degree programs fail to complete them within six years; 70% of those entering two-year associate’s degree programs fail to complete those within three years. Behind these statistics are stories of disappointment and lost opportunity: millions of individuals who believed in the value of education, but could not overcome the obstacles they faced in completing a degree.

The promise of higher education doesn’t have to turn into a bitter memory of failure. Drawing on the latest research, this document identifies key competencies that help students overcome these obstacles. Then, it offers specific institutional strategies for helping students build these competencies—strategies based on the latest evidence about what works in guidance, support, and assessment.

Strengthening these student competencies and employing these institutional strategies can help you significantly improve your completion rates. More than that, they can help you connect college to life success, helping the students who complete your programs to thrive afterwards. They can help make higher education what it should be for millions more Americans: the stepping stone to a better, more fulfilling life.

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Strategies for Building Crucial Metacognitive Skills

It’s widely understood that college success requires not just content mastery, but a set of higher-level learning skills and competencies. Today, many of these are called metacognitive skills, simply defined as “learning strategies, attitudes, and behaviors students employ and improve during the learning process.”

As leading educational researcher Dr. David T. Conley notes, metacognitive skills especially include “things students do to enable and activate thinking, remembering, understanding, and information processing... [Metacognition] occurs when learners demonstrate awareness of their own thinking, then monitor and analyze their thinking and decision-making processes or—as competent learners often do—recognize that they are having trouble and adjust their learning strategies.”

Focusing On Tenacity, Grit, Resilience: What Students Need And Employers Demand

More broadly, metacognition includes what Carol Dweck and others have called “academic tenacity”: the mindsets and skills needed to “work hard and smart for a long time” by staying focused on longer-term or higher-order goals, persist with difficult tasks, withstand setbacks, set and achieve goals, work with others, and build self-efficacy.

These are certainly the competencies employers are asking for when they complain about new employees without the right mindsets, attitudes, or resilience. Mindset was identified as more important than domain skills by 96% of the 13,000 employers recently surveyed by Peak Learning. Moreover, according to Peak Learning’s CEO, Dr. Paul Stoltz, employers identified grit and resilience as the most critical component of mindset. When asked how many typical employees they would trade for one with exceptional grit and resilience, employers’ median answer was 7.3: a truly remarkable data point.

Grit defined: “Perseverance to accomplish long-term or higher-order goals in the face of challenges and setbacks, engaging the student’s psychological resources, such as their academic mindsets, effortful control, and strategies and tactics.”


Teachable Techniques for Better Learning: a Simple Checklist

Many students don’t realize that studying is more than reading and rote memorization. Effective students learn how to plan, monitor, and evaluate their own learning. That can start with a simple, informal checklist of questions students can ask themselves through each stage:

• What am I being asked to learn?
• What do I need to know first?
• Where should I start?
• What are the key points I’m seeing in this reading?
• Am I actually getting this?
• If not, do I need to slow down? What do I need to do instead?
• Is there a mnemonic that could help me? Or some other learning strategy?
• Did I really understand this?
• Now that I have my grade, was I right about whether I understood it?

3 Innovative Measures Course-Taking Behaviors, Presented to the California PSAA Advisory Committee, June 17, 2014, David Conley, Ph.D. CEO, CSO, Educational Policy Improvement Center (EPIC)
4 What the Literature Says about Academic Literacy, Georgia Journal of Reading, (Fall-Winter), 11-18, S. Nist, 1993
5 Just Write Guide, February 2012, Teaching Excellence in Adult Literacy (TEAL); Adapted from TEAL Center Fact Sheet No. 4: Metacognitive Processes; also Fogarty (1994), https://teal.ed.gov/documents/TEAL_JustWriteGuide.pdf
6 Building the Resilient Workforce: Why Mindset Trumps Skillset, Peak Learning
7 Paul Stoltz, Peak Learning, http://www.pearsonhighered.com/baldwin-experience-info/
But metacognition can also involve possessing or developing reasons to build personal resilience and believe in one’s self-efficacy. In less scientific terms, you might call this hope. As Gallup’s Brandon Busteed has written, hope can be measured, as “one’s ideas and energy for the future.” And when Gallup does measure it, they find it predicts college success better than standardized test scores or high school GPAs. This “soft” side of student success proves to be remarkably vital.

Broadening Assessment to Help Every Student as an Individual

Every student arrives with a different mix of metacognitive skills, attitudes, and behaviors. One might possess extraordinary grit, having already overcome massive life obstacles just to show up, but she may have no idea what strategies to use if she cannot understand her textbook. Another may have performed adequately in high school but now resists being challenged to higher performance because he sees no link between his classes and his future career.

If colleges can individually assess students’ metacognitive skills, attitudes, and behaviors, they can help students overcome gaps, address behaviors, or change mindsets in ways that improve the likelihood of success. There is growing evidence that these skills, attitudes, and behaviors can be assessed and improved and that doing so can lead to better outcomes.

Institutions and governments are already experimenting with new tools for measuring metacognition. As these tools evolve, they will help educators move toward equality in helping students acquire and master learning strategies as well as content knowledge. Put another way, educators will have the information they need to help students from all backgrounds “learn how to learn” in any setting, and from the full range of their experiences, throughout their lives.

This leads to a broader point about assessment: it should help us understand each student as an individual, with unique goals, needs, and challenges. It should place the student at the center, where he or she ought to be. It should help students and their institutions work together to design personalized learning programs that eliminate wasted time and effort, and strengthen motivation because students can see how they link to personal goals, and can benefit them.

Representative Metacognitive Skills For College & Career Success

Dr. David T. Conley has identified the following representative examples of metacognitive skills for college success; these align closely with both the demands of employers and growing research evidence on success in the workplace and the military.

- Adaptability
- Career awareness
- Collaboration
- Communication
- Conscientiousness
- Grit (persistence)
- Initiative
- Intellectual curiosity
- Leadership
- Resource utilization
- Time management
- Self-awareness
- Self-care
- Self-control
- Self-efficacy
- Study skills

8 Pathways Reimagined: Exploring Innovative Approaches to Degree Completion and Student Success, Insights from the 2014 AASCU Regional Presidential Symposium (American Association of State Colleges and Universities)
9 Innovative Measures Course-Taking Behaviors
11 The Grit Effect: Predicting Retention in the Military, the Workplace, School and Marriage, Lauren Eskreis-Winkler, Angela Lee Duckworth, Elizabeth P. Shulman and Scott Beal, Frontiers in Psychology, 12 Jan 2014
To quote Dr. Conley, we currently rely on an “assessment system” designed primarily around institutional cost and convenience. We need to shift toward a “system of assessments” with a different set of goals: “to get the most information to help inform the learner to make actionable changes in their strategies and techniques so that they can be more successful [while also generating] information that can be used by a variety of constituents and stakeholders for different purposes.”

As Conley says, future assessments will be based on far more data, offering “a much more precise, high-definition picture of where [the student is], how far they've come, and how far they have to go... a more integrative and personalized series of measures, calibrated to individual student goals and aspirations...”

Build a Culture of Caring Through Mentoring, Coaching and Tutoring

We have already mentioned Gallup’s powerful research demonstrating that hope for the future predicts college success better than GPA or a score on the SAT® or ACT® exam. Ultimately, of course, even as we find better ways to promote learning through assessments and technology, hope comes from an entirely different source: human beings who care. It is only through personal human interaction that we can nurture a student’s hope in the face of tough challenges, or spark hope in a student who has lost it.

Put this way, the research on mentoring and tutoring in colleges might seem almost superfluous: students are obviously likely to do better when they know someone cares and will personally help them. Personal connections made by mentors, coaches, and tutors are often extremely well-suited for promoting self-efficacy, linking learning to career goals, and encouraging greater use of metacognitive strategies.

Not least, mentoring can give students an opportunity to tell someone why they've come, and what they hope to accomplish. If you don't know their destination, how can you help them get there? And if they don't yet have a destination, you need to know that, too, so you can help them find one. This seems intuitive, and the intuition is strongly supported by the research: personal connections work.

Dr. Eric P. Bettinger and Rachel Baker of the Stanford University School of Education randomly assigned professional educational “coaches” to students. Acting as mentors, these coaches stayed in regular contact with their students. They helped students set clear long-term goals, link day-to-day activities to those goals, and build directly relevant skills such as self-advocacy and time management. Coached students were more likely to stay in college, and the retention effect continued a full year after coaching ended. Coaching offered greater value in retention and completion than alternative investments such as increasing financial aid.12

The impact of coaching and mentoring lasts long beyond graduation. Gallup thoroughly reviewed the elements linked to long-term success among college graduates. The three most potent factors all related to personal relationships and support: “feeling that they had a professor who made them excited about learning, that the professors at their alma mater cared about them as a person, and that they had a mentor who encouraged them to pursue their goals and dreams.”13


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Complementing mentoring and coaching, evidence also broadly supports the value of tutoring in promoting academic success, strengthening persistence, and promoting retention—especially among at-risk minority students.

Research shows that personal, individualized, one-on-one tutoring generally works best, and careful tutor training is a key element of a tutoring program's success. The pioneering National Study of Developmental Education found that students in both 2- and 4-year institutions who received tutoring from trained tutors earned higher first-term and cumulative GPAs, and were more likely to be retained at 4-year institutions. When tutors weren't trained, the correlation completely disappeared.14

Gallup's research shows just how much the element of human caring—having someone who excites you about learning, cares about you, and encourages you to pursue your goals and dreams—can impact long-term student success. But it also makes clear how far we have to go in prioritizing supportive human connections throughout our student support systems. With so many students starting college at a disadvantage—and entering the churn of developmental education, which leads more often to defeat than a degree—it's no longer enough for institutions to ask: “How can we afford such services?” They need to ask: “How can we afford not to offer them?”15

From Admission to Completion to Lifelong Success

As colleges evolve their effectiveness metrics to include not just completion, but also long-term return on education, institutional support structures must evolve as well. That means adopting new ways to help learners persist to completion—and preparing them with the skills, strategies, capabilities, and mindsets they'll need to succeed long after college.

What Can You Do to Help Your Students Now?

- Get to know why each student is pursuing education, and leverage that motivation to help them persevere
- Look for ways to deepen and individualize student assessment, and use that data to help the student make positive changes
- Pay attention to early warning signs that a student is having trouble and intervene early
- Develop students' metacognitive learning skills, helping them to plan, monitor, and evaluate themselves
- Support and develop faculty on how to build metacognitive capabilities alongside content knowledge
- Commit to tutor training
- Make the decision to prioritize a long-term coaching strategy
- Think outside the box for ways to make your student support strategies sustainable and scalable
- Start with the end goal in mind, and measure the effectiveness of your strategies, adjusting as needed

Learn more about supporting student success in college and beyond: