The X Factor in College Success

S. high school graduation rates have risen steadily for the past decade, hitting an all-time high of 82 percent in 2013–14 (Rich, 2015). Yet there’s a dark cloud behind this silver lining. According to the most recent data from the U.S. Department of Education (2015), only 59 percent of students who enter four-year colleges complete their degrees within five years.

We might chalk up these divergent trends to a variety of factors, many of which I’ve noted in previous columns (Goodwin, 2011, 2012). Grade inflation has made high school diplomas less of an endorsement of college readiness than they once were. And lifetime earnings of skilled trade workers now eclipse those of lower-achieving college graduates, making the pursuit of “middle skill” jobs (those that require a two-year degree, occupational license, or certification) a potentially better long-term investment than college for many students.

Yet that’s not the whole picture. College admissions offices have long been aware of a certain “X factor” when it comes to predicting whether a student will succeed in college. This factor is something not reflected in high school grade point averages or college entrance exam scores—which together predict only 20 to 25 percent of a student’s college achievement (Ackerman, Kanfer & Beier, 2013; Zahner, Ramsaran, & Steedle, 2014), with the bulk of that variance predicted by high school grades, not test scores (Hiss & Franks, 2014). Most of a student’s success in college (and life, for that matter) seems to lie outside the tidy box of grades and test scores. This prompts the question: What exactly does predict student success?

Finding the X Factor

We probably all know students who did well in high school but flamed out in college—or who underachieved in high school yet excelled in college. Researchers and educators have long agreed that some set of “other” skills and traits must be important. They have sought to capture these areas with labels like noncognitive skills, 21st century skills, social and emotional skills, and character strengths (Kamenetz, 2015). To date, however, it’s not clear which traits are most important and how we should teach or measure them—or whether they can be assessed at all.

Yet, like dark energy and dark matter (which astrophysicists can’t observe, but which they calculate comprises the bulk of the universe because of observable gaps in mathematical models of the universe), this mix of other traits and skills appears to account for most of what makes a student successful. Fortunately, recent efforts to survey students about these “softer” skills—and determine which skills add predictive power to the standard measures—are yielding clues. Some promising predictors have emerged:

- **Can-do attitude.** Perhaps the most important noncognitive factor related to student success is a can-do spirit—feeling capable as a learner and able to achieve one’s goals. A notable meta-analysis by Richardson, Abraham, and Bond (2012) found that the combined factors of academic self-efficacy, goals for course grades, and a feeling of control over life events accounted for roughly 20 percent of the variance in university students’ grade point averages (GPAs)—almost as much as high school grades and test scores.

- **Self-discipline and study habits.** Unbridled...
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optimism alone, however, doesn’t guarantee success: Students must also apply themselves. A meta-analysis of 344 studies (Crede & Kuncel, 2008) found that a constellation of factors related to study orientation—namely, students’ study habits (such as the extent to which they avoided procrastination) and study attitudes (such as the extent to which they bought into the goal of a college education)—had a correlation of .33 with overall college GPA, which translates into roughly 11 percent of variance in GPA.

- Active learning. Students must also dig into their studies, for instance, by participating in classroom discussions, communicating with professors, and talking about their studies with others outside class. An examination of students in 18 colleges and universities found that such forms of student engagement collectively accounted for 13 percent of the variance in college students’ first-year GPAs (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008).

A Hopeful Takeaway

Although these data begin to provide a more robust picture of what predicts college success, the picture is by no means complete. Research to date still falls short of explaining the remaining variance, or X factor, in college success. It’s possible, of course, that researchers haven’t yet identified the right mix of attitudes and character traits that comprise the X factor—or don’t have the right tools to measure them.

Another explanation, however, is that life after high school is nothing like high school, which makes predicting future outcomes from prior achievement difficult, if not impossible. One of the most striking findings in the 2008 Crede and Kuncel meta-analysis was that the data showed virtually no relationship between college study habits and attitudes and high school GPAs. Students in college have far less structure and supervision than in high school, and these researchers conjectured that a strong high school GPA may mask the fact that some students haven’t yet developed the requisite traits a person needs to succeed when no one is bird-dogging them.

Ultimately, this research may suggest a hopeful message—that students aren’t wind-up toys whose life course is dictated by what they do (or don’t do) in high school. They’re human beings whose everyday decisions shape their life outcomes. The real X factor may be the fact that at any point in their lives, students can change their attitudes and habits and, thus, their life outcomes. Perhaps the real takeaway is that students’ outcomes are unpredictable precisely because their past performance—or even their current behaviors—needn’t be a fait accompli. To that, we’d probably all say thank goodness.

References


Kamenetz, A. (2013, May 28). Non-academic skills are key to success. But what should we call them? Retrieved from NPR Ed at www.npr.org/sections/ed/2013/05/28/204684712/non-academic-skills-are-key-to-success-but-what-should-we-call-them


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