Grit, Growth, and Graduation: Mentoring College Students to Greatness

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Abstract

Several factors, such as declining birth rates, and the COVID-19 pandemic, have contributed to the current downward trend in college enrollments in the United States (Marcus, 2021, May 22). Declining enrollments create a greater focus on retention of students. Retention, however, is complicated by factors such as rising tuition costs, an uncertain job market, and questions about the value of education. Educators can impact campus culture to create a sense of belonging and commitment to student success. Some factors that contribute to student success are grit (Duckworth, 2016), and growth mindset (Dweck, 2006), both of which can be developed. When faculty operate with a fixed mindset about students' ability to learn, this may be perceived as a stereotype threat which impedes learning (Muenks et al., 2020). Universities are creating resources to assist faculty in developing a culture of inclusivity and belonging on campus (Gamrat et al., 2021; Gamrat et al., 2023).

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Currently in the United States we are experiencing what is known an "enrollment cliff". The enrollment cliff is a decrease in college enrollment rates that is predicted to begin in 2025, due to a decrease in birth rates in the recession years of 2007-2008. There will simply be fewer 18-years olds to enroll, compared to previous years. A potential 15% decrease in people 18 years of age is expected by the year 2029. This decrease exacerbates other factors that also contributed to declining enrollments. One of these factors was the Covid-19 pandemic, which resulted in a 7%

drop in college enrollment. Prior to the pandemic, enrollments had been declining steadily for a decade (Marcus, 2021, May 22).

While retention has always been an important factor for colleges, declining enrollment rates makes retention a necessity. Retaining college students requires special attention to the barriers that they face in persisting in degree completion and graduation. Some of these barriers include high tuition costs, and an uncertain job market, which combine to make the value of a college education questionable.

The question becomes, how can universities retain students when the path is very difficult, completion is uncertain, and success is not guaranteed? College faculty, staff, and administrators have no control over tuition, the economy, or job markets. They are, however, able to create a culture of belonging on campus where students feel that they are valued and that their success is not only their goal, but ours as well. Here, in fact, is where faculty have the most influence, with some of the greatest impact on marginalized and underrepresented students.

Fortunately, there is a body of work on the factors that contribute to success in a variety of settings. Many of the factors that are commonly associated with success are actually not important, such as intellect, income, standardized test scores, and talent. What emerged as important was a construct called grit, which is described as passion and perseverance for long-term goals (Duckworth, 2016). Success in school requires a commitment to one's future (passion) and working hard to make it a reality even under challenging circumstances (perseverance). Mentoring students to help identify their passion can help them attain the first component of grit. To understand how to develop perseverance, the second component of grit requires an examination of the concept of growth mindset.

Carol Dweck (2006) describes growth mindset as the belief that the intellect, ability, and talent can change with effort. In other words, learning is not fixed and static, but dynamic and a product of determination and perseverance. Conversely, a fixed mindset views these same traits as fixed and unchanging, independent of effort (Dweck, 2006). Neuroscience provides support for the growth mindset in the form of brain plasticity. Neuroplastic change occurs on three interacting levels: chemical, structural, and functional. When we learn new things, our neurons create dendritic spines,

which increases the surface area available for stimulation by neurotransmitters. Over time and with repeated activation, these neural pathways become more efficient. Faculty can use this information to educate and encourage students to persevere in learning new things because their effort can create lasting changes (Chen et al., 2022).

Faculty mindset also has an impact on student learning and is demonstrated in direct and indirect ways. When faculty hold stereotypes that some students are incapable of learning, students are likely to confirm those stereotypes. This stereotype threat interferes with the learning process by engaging the emotional processing part of the brain, the limbic system, and eliciting a fight-or-flight survival response that limits cognitive processing ability. Faculty mindset also impacts student affects student performance. When faculty are perceived as having a fixed mindset, students experience reduced attendance, engagement, interest, grades, and sense of belonging. They experience increased negative affect, imposter feelings, and thoughts of dropping out. Conversely, faculty can demonstrate growth mindset in ways that inform and engage students. Many strategies do not require additional work from faculty and can be incorporated into tasks that the faculty member already does. One example is to use language that encourages students to seek help when they are struggling, that struggling is normal, and that they can master course material with effort. Another example is to use the first day of class to set the tone and expectations for the class in a way that incorporates inclusivity and belonging (Muenks et al., 2020).

There are collaborative efforts at The Pennsylvania State University, to generate resources that faculty can use to create a culture of inclusivity and belonging. The multiple resources created by the College of Information Systems Technology, and the Office of Learning Design, were created to support inclusive teaching and learning design. They include Inclusive ADDIE and action-oriented framework for inclusive practices in education (Gamrat et al., 2021), and a review article with considerations to help faculty develop inclusive teaching and course design (Gamrat et al., 2023).

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