

# The TBR Academic Mindset: Asking the Right Questions for Student Success and Quality Teaching Initiative

## Guiding Principles

- Capturing the complexity of our multifaceted student body more effectively is a critical element in understanding how to best ensure a successful educational experience for students enrolled in TBR institutions.
- *A student's total level of campus engagement, particularly when academic, interpersonal and extracurricular involvements are mutually reinforcing provides the greatest impact towards a student's retention, matriculation and completion.* (Pascarella & Terenzini, 2005, p. 647).
- To this end, the Tennessee Board of Regents wants to understand the multiple factors frequently referred to in the literature as “noncognitive” which may play a role in student success.
- By broadening our understanding of the psycho-social factors related to student success and teaching, we can begin the conversation around developing classroom interventions and an implementation strategy changing the focus and the face of student success.
- There is a need to engage in the extended investment of time and energy in teaching that is driven by knowledge of our students combined with evidence-based and learning practices that been shown to be beneficial for college students (Kuh, 2008). This emphasis will assist in the achievement of the goals of the *Complete College* and *Drive to 55* Initiatives in Tennessee.

## Actions

- The TBR Office of Academic Affairs launched a Think Tank of research faculty drawn from universities across the System to begin a dialogue on aspects which potentially impact student success beyond the cognitive factors traditionally explored.
- The dialogue will be scaled up beginning with a Summit in September 2015 to gain input from faculty across the system.
- A baseline assessment, using a convenience sample of all students enrolled in Learning Support classes employing the Co-requisite model, will be conducted in Fall 2015. This assessment will serve as the foundation of a longitudinal study of psycho-social aspects of student success within TBR institutions.
- Having a better grasp of our students will allow us to develop teaching and learning approaches to assist faculty in the support of student success on a small scale for Spring 2016/Fall 2016 with larger-scale interventions in Fall 2017.

## The Framework of Our Current Questions

- What are the best measures of student success?
- What factors are critical in promoting student success?
- Is a growth mindset associated with greater student success?
- What student profiles are associated with greater student success?
- Do students who are more success oriented/ exposed to a growth mindset change majors fewer times?
- Will fostering belonging/inclusion among community college students increase their receptiveness to effective feedback and improve student success?
- Can a student success mindset be developed and, if so, how?
- What impact will the Tennessee Promise have on building a student success academic mindset?
- What is the “natural” developmental trajectory of academic mindset?
- What is the “natural” developmental trajectory to career planning?
- Is academic success best understood as properties of individual students or a products of student’ contexts (e.g., family, faculty, campus)?

## Factors for Consideration

### Belonging and Inclusion

Uncertainty about belonging and feeling authentically included in a new social and academic setting has a negative impact of student retention and success (Walton & Cohen, 2007; Walton & Cohen, 2011). This effect is magnified when a student is targeted by stigma or negative stereotypes.

### Cognitive Factors

Grades are better predictors than standardized test scores of long-term educational outcome (HS graduation, college enrollment, college graduation) and life outcomes (wages, health, longevity, civic participation) (Consortium on Chicago School Research, 2014).

### Feedback

Paying attention to nature of information provided by an agent (e.g., teacher, peer, parent) regarding aspects of a student’s performance or understanding in response to performance has been shown to improve student outcomes (Hattie & Timberley, 2011). This feedback can include “constructive criticism” (Yeager, Purdie-Vaughans, Garcia, Apfel, Brzustoski et al., 2014).

### Mindset

**Fixed Mindset.** This refers to the belief that intelligence is fixed; e.g., agreeing with statements such as “If I have to try harder, I’m clearly not smart,” “There is no point in trying if

it doesn't come *naturally*." Praising children for being "smart" creates a fixed mindset (Mueller & Dweck, 1998) and reduces performance and motivation.

**Growth Mindset.** This refers to the belief that intelligence is malleable. Obstacles can be overcome through effort, help from others, and use of improved strategies; e.g., agreeing with a statement such as "Trying harder makes you smarter." NOTE: Mindset changes are not just getting students to try harder (Yeager, Panesku, et al., in press). Praising the process versus the ability of doing something creates a growth mindset.

### **Non-Cognitive Factors**

There are many factors that can affect student success besides the content knowledge and core academic skills that are measured by standardized achievement or intelligence tests. Among these non-cognitive factors are **social skills** (e.g., interpersonal skills, empathy, cooperation, assertion, responsibility), **academic behaviors** (e.g., going to class, doing homework, participating in class), **learning strategies** (e.g., metacognitive strategies, study skills, self-regulated learning, goal setting), **academic mindset** (a wide range of beliefs and attitudes about oneself in relation to an academic work academic, such as goal orientation, implicit theories of ability, locus of control, stereotype threat), **perseverance** (e.g., Grit, tenacity, self-control, effort, delayed gratification) (Nagaoka, Farrington, Roderick, Allensworth, Keyes et al., 2013). Heckman (2008) includes motivation, socioemotional regulation, time preference, personality factors and the ability to work with others as being important facets of student success. Cribbs, Hazari, Sonnert, and Sadler (2014) focus on the role of interest, competence, performance and recognition as noncognitive elements in identity development.

### **Teaching**

There are brief and inexpensive "mindset" interventions with large and enduring effects in both K-12 and 4-year college settings (Yeager & Walton, 2011). Global encouragement, substantive feedback and "wise feedback," as well as criticism paired with high standards and assurance, can have a major impact on promoting student success (Yeager, Purdie-Vaughans, Garcia, Apfel, Brzustoski et al., 2014). The use of these kinds of interventions requires training and buy-in from teachers.

### **Productive Persistence**

Language of the Carnegie Institute for the Advancement of Teaching and Learning initiative to understand issues of impediment and advancement of the student success agenda.

### **Self-Efficacy**

A person's belief in his or her ability to succeed in a particular situation. These beliefs are viewed as determinants of how people think, behave, and feel (Bandura, 1994).

### **Tenacity/Resilience**

Tenacity + Good strategies = Productive Persistence (Carnegie Foundation for the Advancement of Teaching).

## **References/Resources:**

- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*, 4. New York: Academic Press, 71-81.
- Consortium on Chicago School Research ([www.ccsr.uchicago.edu](http://www.ccsr.uchicago.edu)) (25 June 2014). Noncognitive Factors and Young Adult Success. Presentation to the U.S. Department of Education College Access Affinity Group.
- Cribbs, J.D., Hazari, Z., Sonnert, G, & Sadler, P.M. (2015). Establishing an explanatory model for mathematics identity. *Child Development*, XX, p 1-15. DOI: 10.1111/cdev.12363.
- Hattie, J., & Timberley, H. (2007). The power of feedback. *Review of Educational Research*, 77 (1), 81-112. DOI: 10.3102/003465430298487.
- Heckman, J.J. (2008). Schools, skills and synapses. *Economic Inquiry*, 46(3), 289-321.
- Kuh, G. D. (2008). *High-Impact Educational Practices: What They Aare, Who Has Access to Them, and Why They Matter*. Washington, DC: American Association of American Colleges and Universities.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75, 33-52.
- Nagaoka, J., Farrington, C. A., Roderick, M., Allensworth, E., Keyes, T.S., Johnson, D.W., & Beechum, N.O. (2013, Fall). Readiness for college: The role of noncognitive factors and context. *Vue*, 45-52.
- Pascarella, E., & Terenzini, P. (2005). *How College Affects Students (Vol 2). A Third Decade of Research*. San Francisco: Jossey-Bass.
- Project for Education Research That Scales (PERTS). [www.perts.net](http://www.perts.net)
- Yeager, D. S, & Walton, G. M. (2011). Social-psychological interventions in education: They're not major. *Review of Educational Research*, 81(2), 267-301. DOI: 10.3102/0034654311405999.
- Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., Hessert, W.T., Williams, M. E., & Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology, General*, 143 (2), 804-824.
- Walton, G.M., & Cohen, G. L., (2007). A question of belonging: Race, social for, and achievement. *Journal of Personality and Social Psychology*, 92, 82-96.
- Walton, G.M., & Cohen, G. L., (2011). A brief social-belonging intervention improves academic and health outcomes among minority students. *Science*, 331, 1447-1451.