

RESEARCH BRIEF

Summary of 2019 CCCSE Report: *A Mind at Work*¹

I. Introduction

In its 2019 national report, *A Mind at Work*, the Center for Community College Student Engagement (CCCSE) surveyed students and faculty regarding *academic mindset*: individuals' beliefs about how learning and intelligence work. Respondents exhibiting a *productive* academic mindset gave positive answers to questions reflecting the belief that one can change one's intelligence. The present research brief summarizes CCCSE's findings in the report.

The *A Mind at Work* report linked academic mindset to vital initiatives that many community colleges are implementing currently. These include:

- Updating advising practices to help undecided students find their direction and all students to focus their learning
- Championing student engagement to help students see themselves as members of a learning community
- Designing student pathways, including developmental-education programs, to minimize the "othering" of developmental students

Academic mindset initiatives reflect new understanding of how learning happens, where student-success improvements should be made, and how equity gaps among students should be closed.

In This Brief

The 2019 *A Mind at Work* report conveyed the following four main findings from CCCSE's academic-mindset surveys of students and faculty:

1. Among students, more-productive academic mindsets correlated with higher self-reported GPAs (see Figures 1 and 2).
2. More students believed that they could change both their overall intelligence and their intelligence with respect to their English (i.e., reading and writing) coursework than believed that they could change either their mathematics coursework-related intelligence or their test-taking ability.
3. For two of four academic-mindset survey components (i.e., "self-efficacy" and "relevance of academic experience"), nontraditional-aged students responded more positively to productive-academic-mindset questions than did traditional students.
4. Almost one-quarter of faculty (i.e., 24 percent) believed that only some or even none of their students could change their intelligence.

¹Note: The present Research Brief summarizes data from CCCSE's 2019 *A Mind at Work* report.

II. Four Components of Academic Mindset

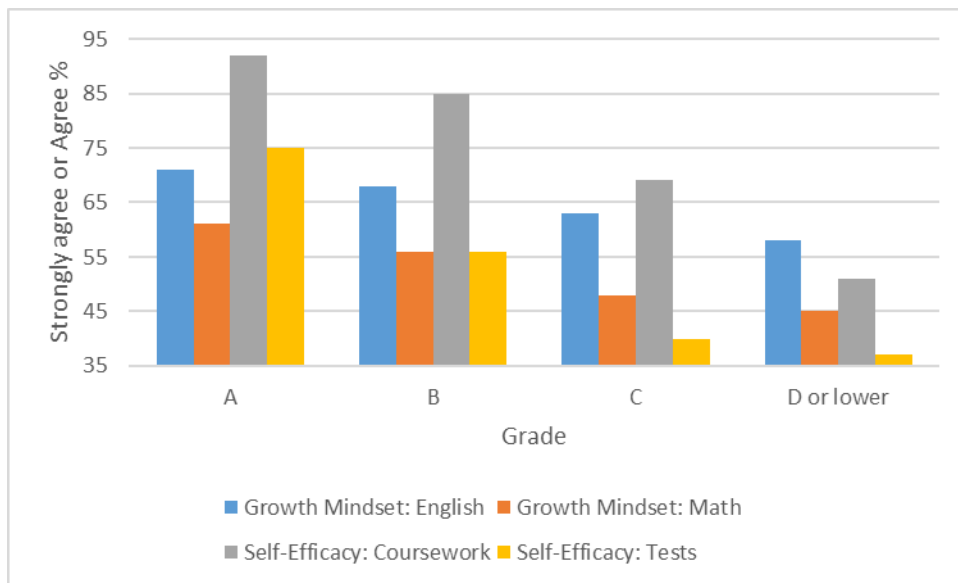
CCCSE surveyed students and faculty regarding four components of academic mindset:

1. **Growth versus fixed mindset**, which reflects students' beliefs in their potential to change their intelligence
2. **Self-efficacy**, which reflects students' confidence in their abilities to be successful in their coursework
3. **Relevance of academic experience**, which reflects students' perspectives about whether or not their coursework is preparing them for their careers and future success
4. **Sense of belonging**, which reflects students' views about whether they are accepted as members of their college communities

A relatively productive academic mindset was one in which respondents gave relatively positive answers to questions reflecting the belief that one can change one's intelligence. CCCSE placed the survey responses onto a continuum, with relatively productive academic mindsets at one end and relatively nonproductive academic mindsets at the other. Most responses indicated that students held *mixed* academic mindsets (i.e., the responses signaled a mixture of some productive and some nonproductive academic-mindset characteristics).

Students with relatively productive academic mindsets held correspondingly positive opinions regarding the four academic-mindset components. Students who signaled that they held relatively productive academic mindsets also had higher self-reported GPAs (see Figures 1 and 2). Relatively-highly-productive academic mindsets correlated with higher levels of student engagement.

Figure 1: Growth Mindset & Self-Efficacy Correlate with Higher GPA

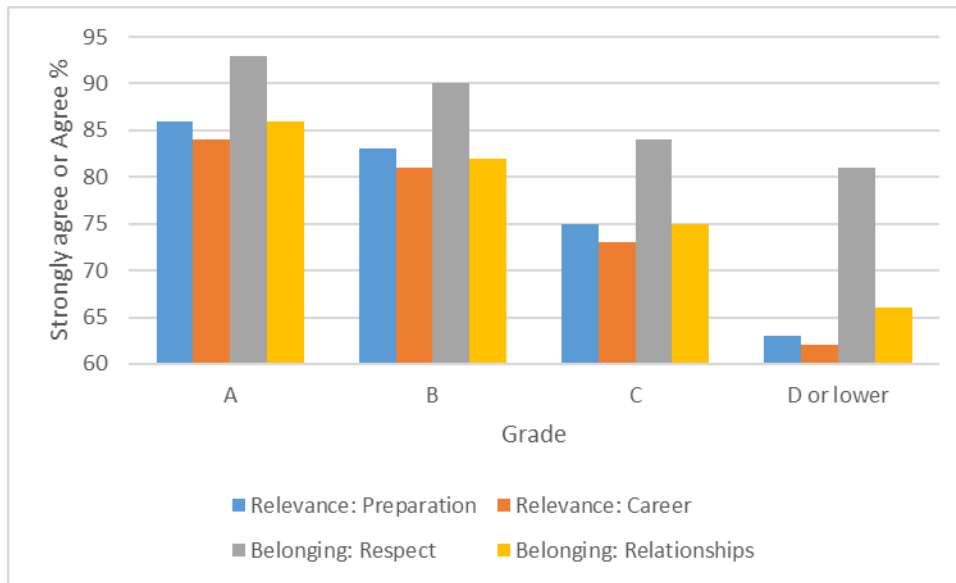


Adapted from the Center for Community College Student Engagement. (2019). *A Mind at Work*.

The survey's main finding was that students expressed relatively high levels of belief that they could change their intelligence with respect to both their English (i.e., reading and writing) coursework and their overall intelligence. In contrast, students expressed relatively low levels of belief that they could change their intelligence regarding either their mathematics coursework or their test-taking abilities. For two of the four academic-mindset components (i.e., "self-efficacy" and

“relevance of academic experience”), nontraditional-aged students’ survey responses indicated that they held relatively-more-productive academic mindsets that did traditional-aged students.

Figure 2: Relevance of Academic Experience & Sense of Belonging Correlate with Higher GPA



Adapted from the Center for Community College Student Engagement. (2019). *A Mind at Work*.

Regarding faculty responses, the survey found that while most faculty believed that one can change one’s intelligence, almost one-quarter of surveyed faculty (i.e., 24 percent) expressed the belief that only some or even none of their students could change their intelligence.

III. CCCSE Recommendations for Colleges and Faculty

CCCSE advised colleges to help students move from relatively nonproductive to relatively productive academic mindsets. The organization made recommendations regarding each of the four academic-mindset components. These are discussed below and summarized in Table 1.

For the growth-versus-fixed-mindset component, faculty should teach students about the results of growth-mindset research, connect coursework to students’ interests and goals, and help students develop improvement strategies that they can implement whenever they experience setbacks. Colleges should design courses that assess students’ mastery of content by the end of the course, and faculty should provide students with detailed feedback about their coursework. The organization advised colleges to provide faculty with professional development to support implementation of these recommendations.

In relation to the self-efficacy component, faculty should set clear expectations for coursework, help students process any setbacks that they may experience, share examples from their own learning processes, teach productive-mindset concepts, and build low-stakes assessments into their courses.

Regarding the relevance-of-academic-experience component, colleges should require both academic advising and academic planning for all students, develop first-year experience programs,

and require that students engage in applied-learning activities. Colleges should also align coursework to students' programs of study—especially in mathematics—and help students understand the relevance of their coursework to their programs of study.

Table 1: Four Components of Academic Mindset: CCCSE Recommendations for Colleges and Faculty

<p>1. Growth vs. Fixed Mindset</p> <ul style="list-style-type: none"> ✓ Teach growth mindset research ✓ Connect coursework to interests ✓ Guide setback-improvement strategies ✓ Provide professional development ✓ Give detailed feedback ✓ Assess for content mastery 	<p>2. Self-Efficacy</p> <ul style="list-style-type: none"> ✓ Set clear expectations ✓ Help students process setbacks ✓ Share learning-process examples ✓ Teach productive-mindset concepts ✓ Include low-stakes assessments
<p>3. Relevance of Academic Experience</p> <ul style="list-style-type: none"> ✓ Require advising and academic plans ✓ Develop first-year experiences ✓ Require applied learning ✓ Align math to programs of study ✓ Explain course relevance 	<p>4. Sense of Belonging</p> <ul style="list-style-type: none"> ✓ Require a welcome orientation ✓ Place students in cohorts ✓ Learn students' names ✓ Require group projects ✓ Create comfortable gathering areas ✓ Require faculty-student meetings

Adapted from the Center for Community College Student Engagement. (2019). *A Mind at Work*.

With respect to the sense-of-belonging component, CCCSE counseled colleges to place students into cohorts, require students to complete group projects, and compel matriculating students to attend a welcome orientation. Additionally, CCCSE recommended that colleges create comfortable gathering areas for students and require that faculty meet with students individually at least once per semester. The organization also suggested that faculty learn their students' names.

IV. Results

CCCSE profiled three colleges that have implemented academic-mindset initiatives with encouraging results:

- Seattle Central College, located in Washington State, has paired growth-mindset activities with an accelerated-math-pathways curricular redesign. In Fall 2013, the college saw an 18-percentage-point increase year-over-year in the number of students completing developmental math.
- Chippewa Valley Technical College, located in Wisconsin, has integrated into all of its degree programs a “Start Strong” learning module that includes a growth-mindset component. In Fall 2017, 55 percent of surveyed students reported making positive changes to their learning strategies after completing the module.
- Cleveland State Community College, located in Tennessee, has included a growth-mindset module in its first-year seminar course. In Fall 2017, while 35 percent of surveyed students identified with a growth mindset before completing the module, 55 percent identified with a growth mindset after completing it.

References

Center for Community College Student Engagement (CCCSE). (2019). *A mind at work: Maximizing the relationship between mindset and student success*. Retrieved from <https://www.ccsse.org/NR2019/Mindset.pdf>