

Online But Not Alone: Supporting Inclusion and Belonging in the Online Learning Environment

Quality Instruction Series #2

Presenters





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Session Overview





Reflecting on ourselves and our students

What do your students do and what do they say when they are struggling unproductively?

What do you say to your students when they are struggling unproductively? What do you do to help your students when they are struggling unproductively?





Student Disengagement

Students disengage for a variety of reasons. Some common reasons include:

- No longer interested in the course.
- Can't see how what they're learning can be used in other classes or after college.
- Course content isn't intuitive or structured coherently.
- Unfamiliar and not confident with technology.
- The material is too hard.
- Don't feel like they belong in the class or at college.
- Don't want to look stupid in front of their classmates or teachers.
- Are tired.
- Are overwhelmed with trying to balance being a college student with being away from home without rules.
- Have personal/family/job issues that arise.





Online Learning: Rethinking what's possible...



Independent and asynchronous learning can:

- leave many students feeling isolated in their learning,
- lead to disengagement, and, ultimately,
- the inability to complete the course



When students work together and receive support, they:

- build community,
- grow their belief in their ability to learn math, and
- achieve improved course outcomes



Productive Persistence: Tenacity + Good Strategies

Social Belonging	Students feel socially tied to peers, faculty, and the course.
Course Value	Students believe the course has value.
Growth Mindset	Students believe they are capable of learning.
Skills & Know-how	Students have skills, habits, and know-how to succeed in college setting.
Support	Faculty and college support students' skills and mindsets.



Carnegie Math Pathways Online Learning Cycle





Building Student Sense of Belonging

Starting Strong

- Establishing norms and expectations
- Shifting students' beliefs about themselves
- A clear structure that promotes engagement

Staying Strong

- Reinforcing classroom norms and expectations
- Sustaining Students' Beliefs about Themselves
- Motivational and Cognitive Supports











Digital course landing page design

Digital course structure

Course Launch Experience (welcome package)



Garrison, Anderson, & Archer (2000): Community of Inquiry





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First contact: Course landing page design



- 1. Welcome video
- 2. Setting expectations: Key details about engagement, grading/evaluation, course completion
- 3. Syllabus activity (e.g. scavenger hunt)
- 4. Navigational video tutorials
- 5. Communication methods/norms and how to get help
- 6. First/Next steps (e.g. discussion activity, needs analysis)



Course structure: Learning Cycles

- 1. Leverage the digital course space to make learning cycle apparent to students
- 2. Some variation is expected/warranted, but built around consistent structure/flow
- 3. The online learning environment should be predictable, structured, familiar, and, thereby, safe

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Week 1: Welcome Package



- 1. Welcome video and landing page design
- 2. Getting to know you
- 3. Syllabus activity
- 4. Cyclical course structure
- 5. Week 1 orientation session(s)
 - a. Model engagements
 - b. Syllabus follow-up
 - c. Contract activity
 - d. Key dates/details





Learning mindsets



WISE feedback



Regulation Strategies and metacognition



"Being a 'math person' or not is something about you that you really can't change. Some people are good at math and other people aren't."





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Staying Strong for Student Sense of Belonging Growth vs. Fixed Mindset



Fixed Mindset (intelligence is fixed)

• There is no point in trying if one is not a "natural."

Growth Mindset (intelligence is malleable)

 Obstacles can be overcome through effort, help from others, and use of improved strategies





Staying Strong for Student Sense of Belonging: Growth Mindset Reading & Writing Activity

You Can Grow Your Brain New Research Shows the Brain Can Be Developed Like a Muscle By: Lisa S. Blackwell and David S. Yeager

Many people think of the brain as a mystery. We don't often think about what intelligence is or how it works. And when you do think about what intelligence is, you might think that a person is born either smart, average, or dumb—either a "math person" or not—and stays that way for life.

But new research shows that the brain is more like a muscle—it changes and gets stronger when you use it. Scientists have been able to show just how the brain grows and gets stronger when you learn.

Everyone knows that when you lift weights, your muscles get bigger and you get stronger. A person who can't lift 20 pounds when they start exercising can get strong enough to lift 100 pounds after working out for a long time.



That's because muscles become larger and stronger with exercise. And when you stop exercising, the muscles shrink and you get weaker. That's why people say "Use it or lose it!"

But most people don't know that when they practice and learn new things, parts of their brain change and get larger, a lot like the muscles do. This is true even for adults. So it's not true that some people are stuck being "not smart" or "not math people." You can improve your abilities a lot, as long as you practice and use good strategies.



Inside the outside layer of the brain—called the cortex—are billions of tiny nerve cells, called neurons. The nerve cells have branches connecting them to other cells in a complicated network. Communication between these brain cells is what allows us to think and solve problems. "Most people don't know that when they practice and learn new things, parts of *their brain change* and get larger, a lot like the *muscles* do. This is true **even for adults**. So it's not true that some people are stuck being "not smart." *You can improve* your abilities a lot, as long as you *practice* and *use good strategies.*"



Randomized study

Course dropout reduced by 51% with growth mindset activity



In collaboration with: Greg Walton, Dave Paunesku, Carol Dweck, Carissa Romero, Roberta Carew, & <u>www.perts.net</u>

N = 288, Z = 2.87, p = .004



"How often, if ever, do you wonder: Maybe I don't belong here?"



Figure 26: Belonging uncertainty after four weeks. High uncertainty: response = 1 or 2; moderate uncertainty: response = 3; no or low uncertainty: response = 4 or 5.



Staying Strong for Student Sense of Belonging Wise Feedback

Wise Feedback helps build trust by communicating:

- 1. High standards
- 2. Targeted feedback
- 3. Assurance





Staying Strong for Student Sense of Belonging Stress Reappraisal





Staying Strong for Student Sense of Belonging Stress Reappraisal





Staying Strong for Student Sense of Belonging, Self-Regulation, and Metacognition Awareness



Self-regulated learning built into every exercise and practice opportunity. Four stage cycle (Zimmerman, 2011)

- 1. Information gathering
- 2. Goal setting and planning
- 3. Enact study strategy
- 4. Identify next adaptations

Metacognition intro or exit tickets

Two questions:

- 1. What is one thing you are confident about?
- 2. What is one thing that you still have questions about?





What are your questions?



Thank you!

For more information, email our team at: info@carnegiemathpathways.org.

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