

# Strengthening Learning Through Enhanced Growth Mindset

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February 3<sup>rd</sup>, 2017

Tempe, AZ



# Agenda

- About Growth Mindset
- Impact on Achievement
- Changing Mindsets at Scale
- Get Involved!



# Familiarity with Growth Mindset

- Totally new
- Some familiarity
- Actively implementing



# What Affects Student Success?

- Intelligence
- Previous experience
- Teacher and school quality
- Structural factors, e.g., poverty, trauma, discrimination
- **Students' mindsets**



# You Don't See Unmotivated Babies



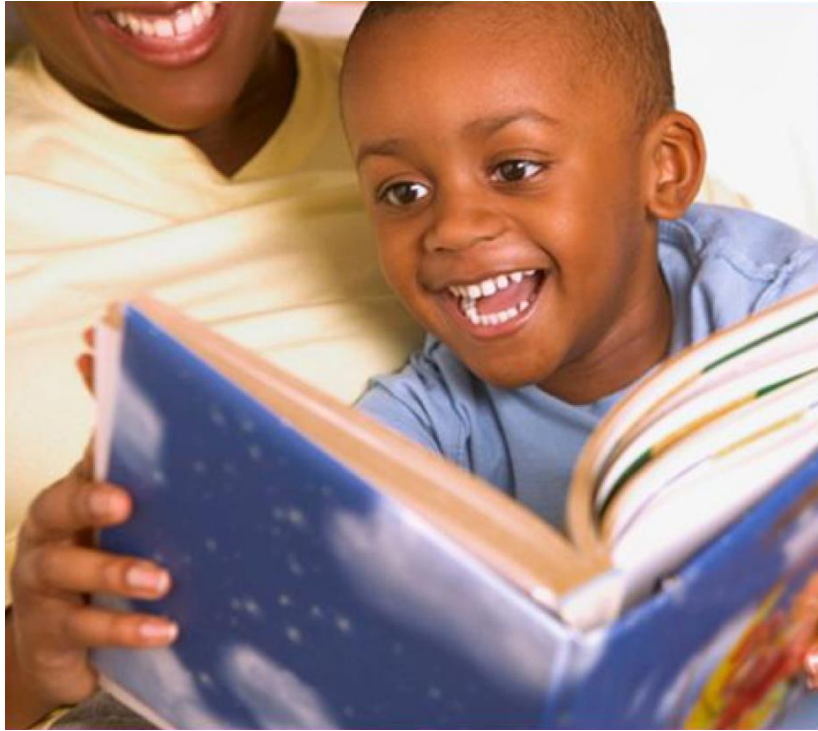






# Mindsets

Certain beliefs make learning feel...



safe and exciting.



# Mindsets

While others make learning feel...



threatening and scary

or maybe just irrelevant







# What does critical feedback mean?

Look at all these comments. I guess I'm not very good at this.

Look at all these comments. These are really helpful!





# Mindsets Influence Behavior

What's the point of revising this if I'm stupid.

These will help me make my next version even better.









# Three Important Learning Mindset

**Growth Mindset:** Do students believe their abilities can be developed?

**Belonging:** Do students believe they belong in school and trust that others value and respect them?

**Purpose/Relevance:** Do students feel like their schoolwork is meaningful?



# Professor Carol Dweck





# Mindsets About Intelligence



## Fixed Mindset

- Intelligence is a fixed trait
- You can't change it



## Growth Mindset

- You can grow your intelligence through effort, practice, and good strategies



# Mindsets Shape Goals

## **Fixed Mindset Goal**

Look Smart at All Cost!

*“The main thing I want when I do my school work is to show how good I am at it.”*

## **Growth Mindset Goal**

To Learn at All Cost!

*“It’s much more important for me to learn things in my classes than it is to get the best grades.”*



# Emotions and Engagement

|                              | Growth | Fixed |
|------------------------------|--------|-------|
| Mistakes                     |        |       |
| Being challenged<br>(effort) |        |       |
| Critical feedback            |        |       |
| Reactions to failure         |        |       |



# Emotions and Engagement

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# Emotions and Engagement

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| <b>Reactions to failure</b>      | <b>Resilient</b><br>Short-term and surmountable              | <b>Helpless</b><br>Proof of not “having what it takes”                  |



# Reaction to Failure

## Helpless

*“I would spend less time on this subject from now on.”*

*“I would try not to take this subject ever again.”*

*“I would try to cheat on the next test.”*

## Resilient

*“I would work harder in this class from now on.”*

*“I would spend more time studying for the tests.”*

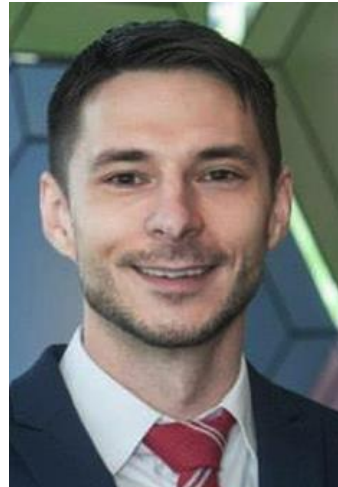


# Mindsets Predict Achievement

## Evidence From A Nationwide Sample In Chile



Susana  
Claro



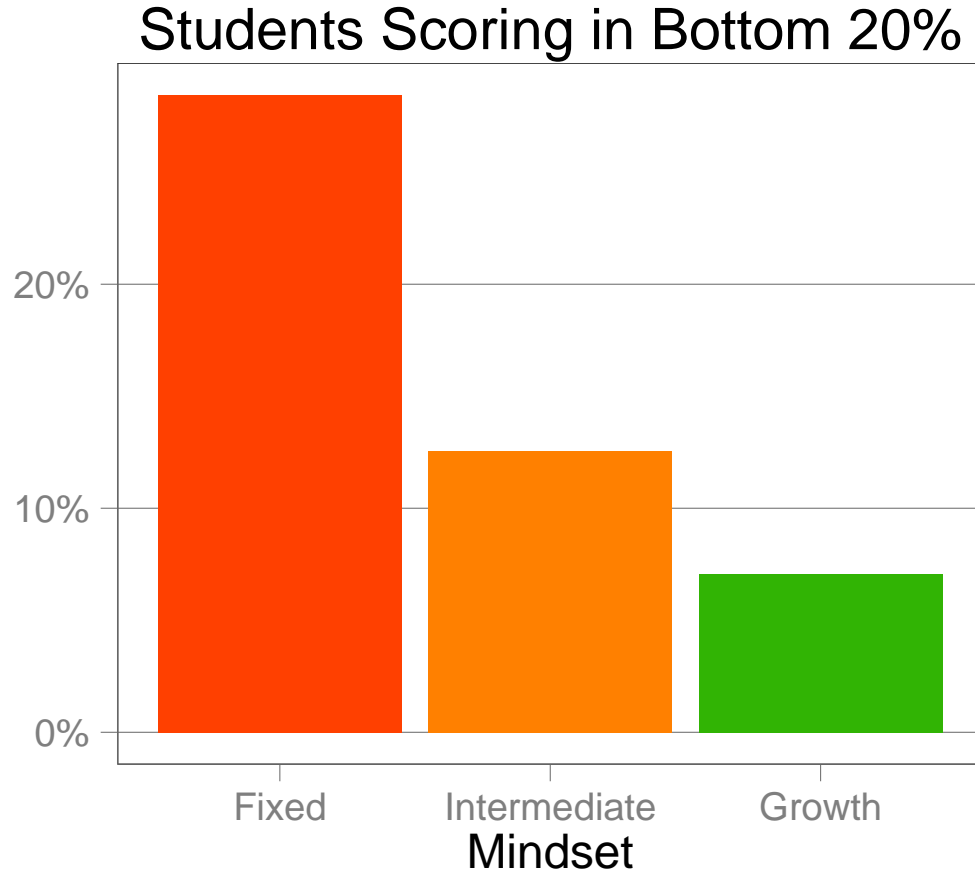
Dave  
Paunesku

- Chilean National Achievement Test
- 10th grade test incorporated Growth Mindset Assessment
- **N = 168,533**

Claro, Paunesku, & Dweck (2016)



# Fixed Mindset and Bottom Scores

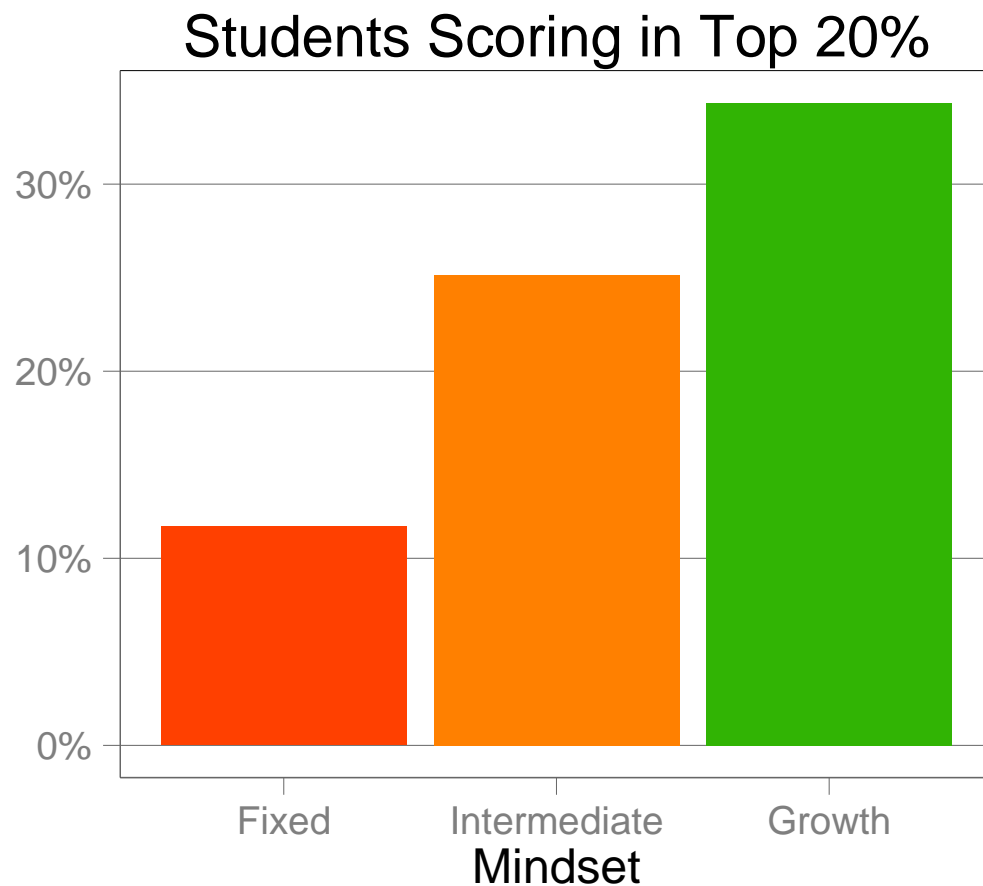


Fixed Mindset students were **4x more likely** to score in the bottom fifth!

Claro, Paunesku, & Dweck (2016)



# Growth Mindset and Top Scores

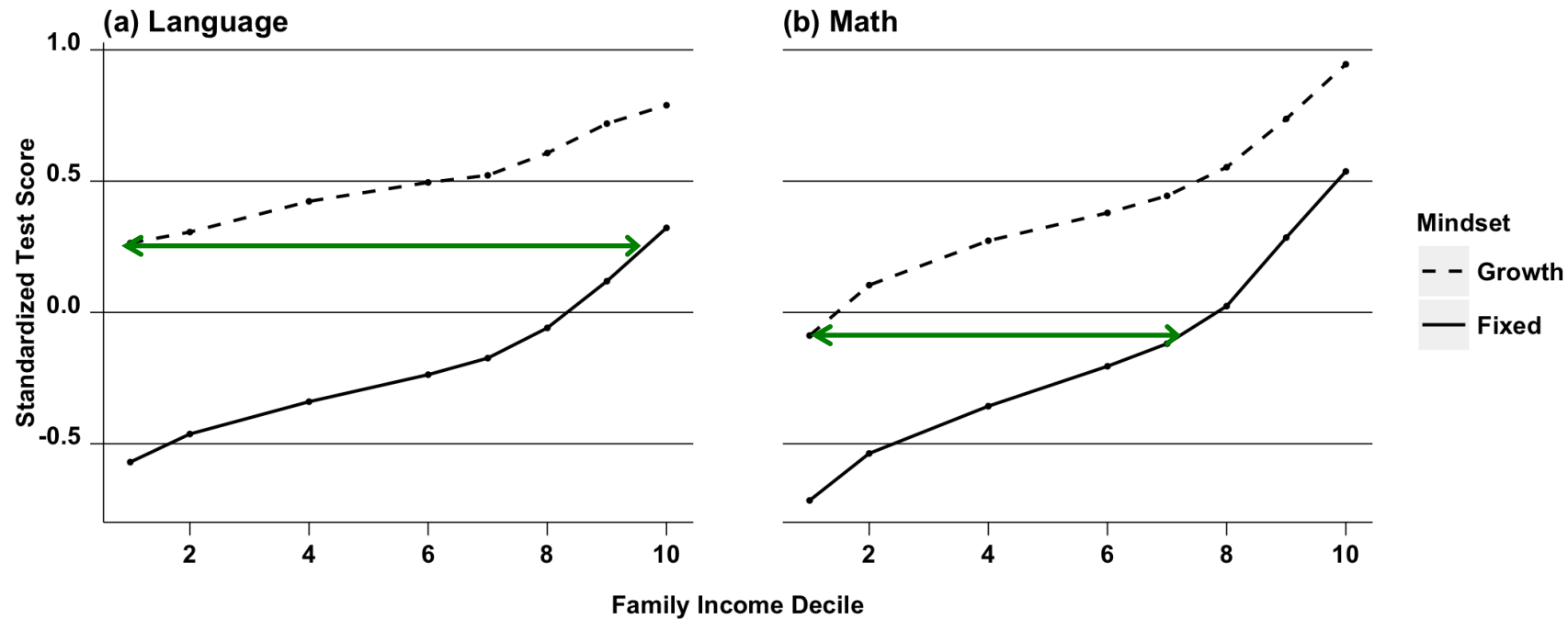


Claro, Paunesku, & Dweck (2016)

Growth Mindset students were **3x more likely** to score in the top fifth!



# Mindsets and Family Income



Claro, Paunesku, & Dweck (2016)



# Mindsets Can Change!





# Ivy Tech CC Collaboration

## Background:

- Faculty lament: “Our students lack motivation”
- Search for answers led to Yeager and Walton
- Conversation with Yeager led to PERTS

## Implementation:

- PERTS sent instructions for administering intervention
- Faculty followed script—students awarded 10 points
- Student data sent to PERTS after semester
- Intervention results presented at statewide conference
- Interventions expanded throughout the state



# Ivy Tech CC Collaboration

## Study Design:

- 966 students, [84% White, 7% Black, 2% Latino, 5% other]
- 5 Ivy Tech colleges
- Randomized controlled trial
- Track students academic outcomes for 2 years

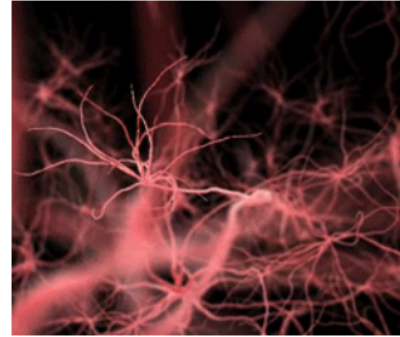
## Intervention:

- Two 45-minute online sessions, 2-4 weeks apart
- Taught about the brain and neural plasticity
- Discuss implications for effort, help seeking, and intelligence



## Intelligence Is About Connections

The outside layer of the brain, which is called the cortex, is made up of billions of nerve cells called neurons. These cells have branches connecting them to other cells in a complex network. Communication between these cells is what allows us to think and solve problems.



When you learn new things, the connections between these nerve cells actually multiply and get stronger. The more you challenge your mind to learn, the more your brain cells connect to each other and the stronger those connections get.

Therefore, even things that once seemed hard or impossible, like doing calculus or becoming a good writer, become easier. The result is a stronger, smarter brain.



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[>>](#)





## Student #512

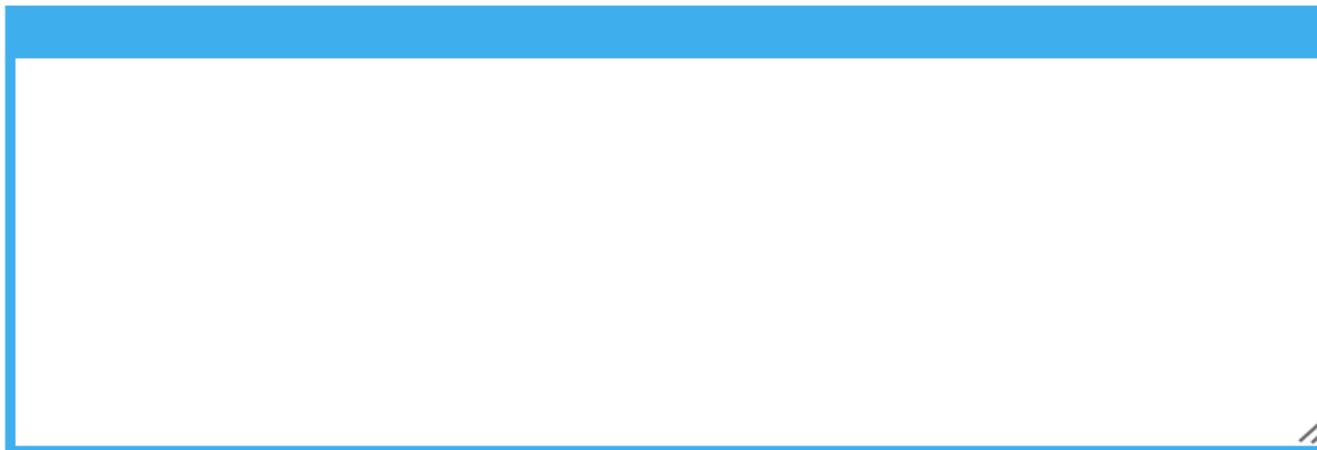
*I used to get so down seeing other people who were better at school than I was. I thought they were just born smarter than me. But in talking to them, I've realized just how much work they actually put in, and really I can do the same thing. It's not about being smarter than other students, it's about being smarter than I was yesterday. Maybe I'm not good at some subjects yet, but I know what I need to do to get better. And when something's really hard, I always remind myself that I'm just not good at it yet.*



## Help Us Explain This to Other Students!

Some students don't realize the brain can grow smarter with practice and the use of better strategies. When something is hard, they feel dumb and stop trying. Students who understand that they can grow their intelligence act differently when something is hard—they try harder and look for new strategies. Over time, students who understand that they can grow their intelligence spend more time studying the right way, and they do better in school and become smarter.

Sadly, there are still a lot of students who don't understand how they can grow their intelligence or that it's even possible. We'd like your help to explain to these students that you can grow your intelligence with practice and better strategies. We will share your responses with future students who complete this survey. We know this understanding will help these students do better.





# Leveraging Persuasion Research

## Clear Analogy

- The brain is like a muscle!





# Leveraging Persuasion Research

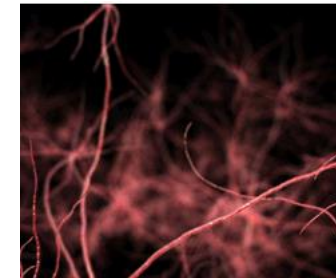
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- The brain is like a muscle!



## Source Credibility

- Neuroscience evidence for mechanism
- Peer endorsement of positive norm





# Leveraging Persuasion Research

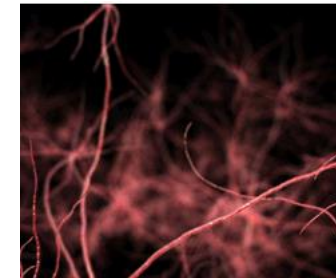
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## Self-authoring

- Honorific – “we need your help explaining these ideas”
- Writing activity to internalize the message
- Mental rehearsal





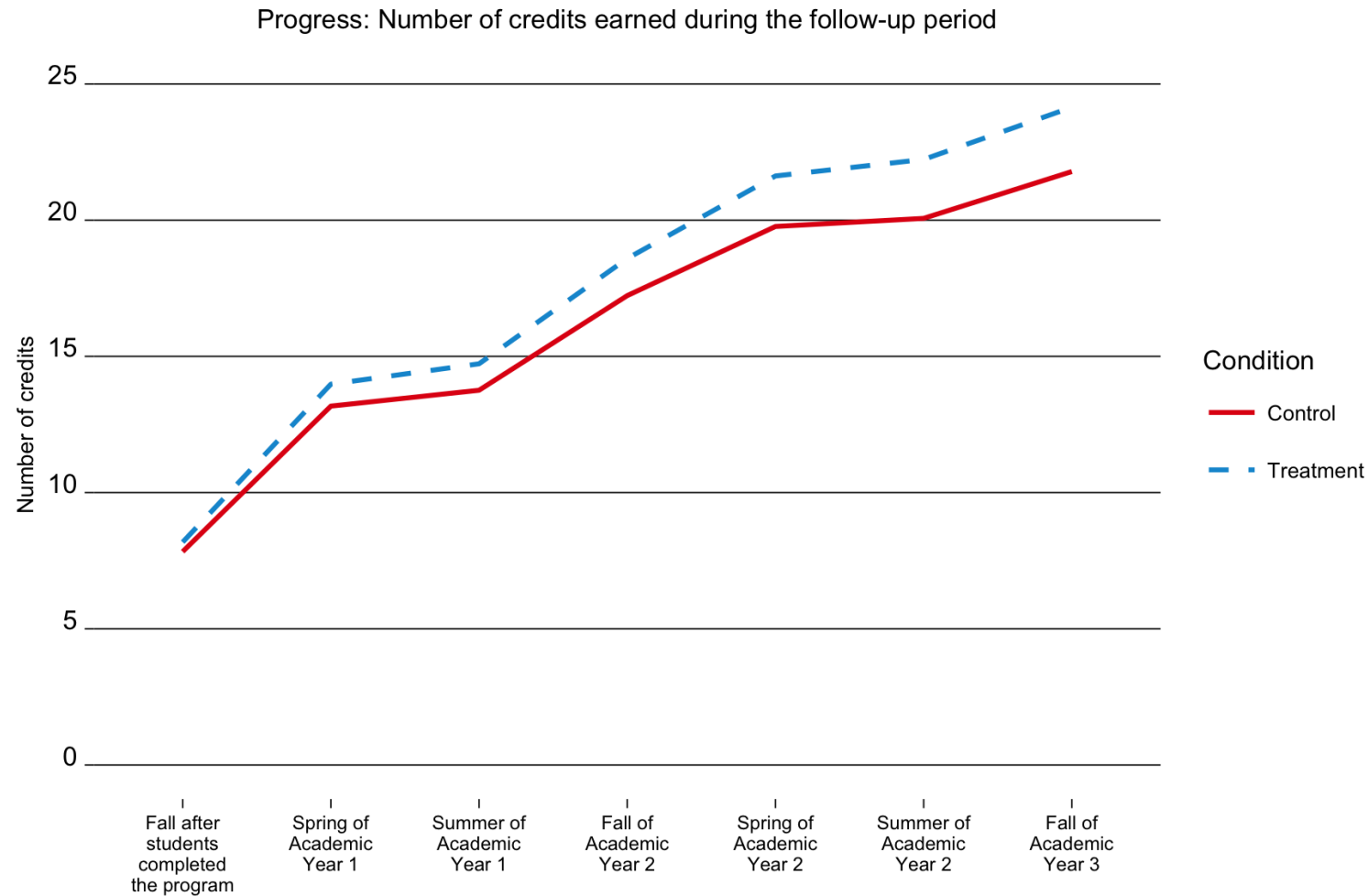
# Measuring Success

Student is successful if they...

- Remain enrolled
- Earned an associate degree
- OR transferred to 4-year college



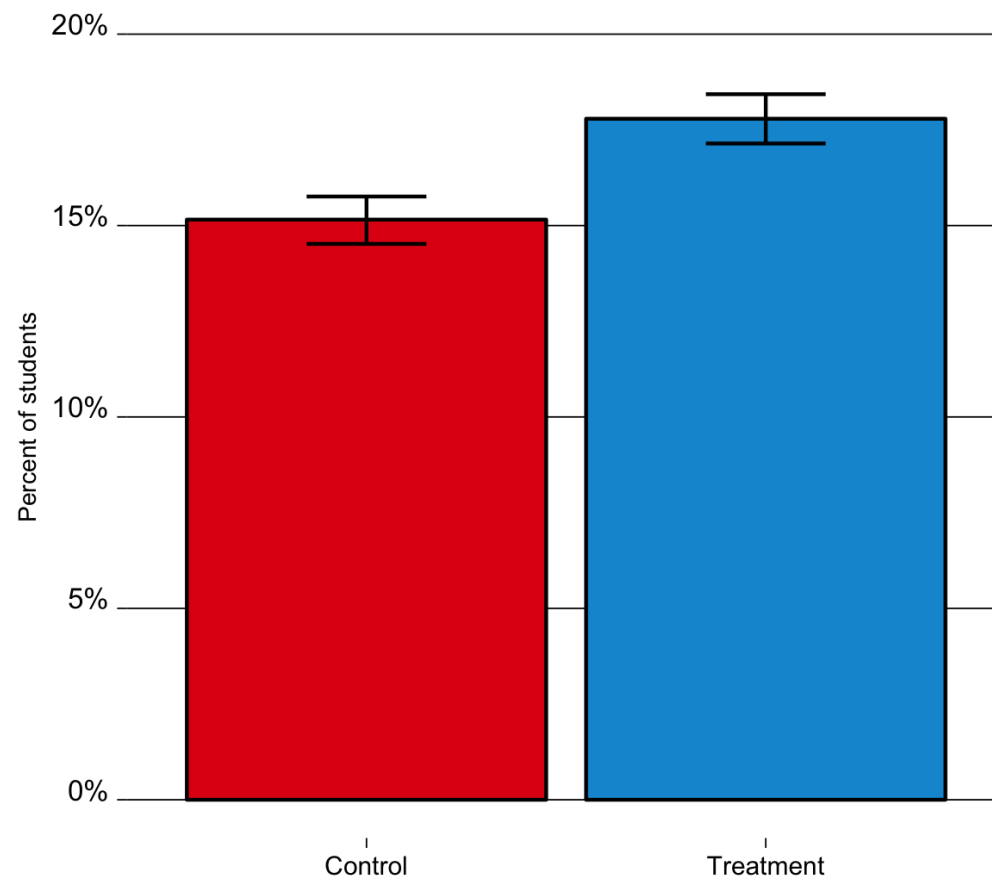
# Results





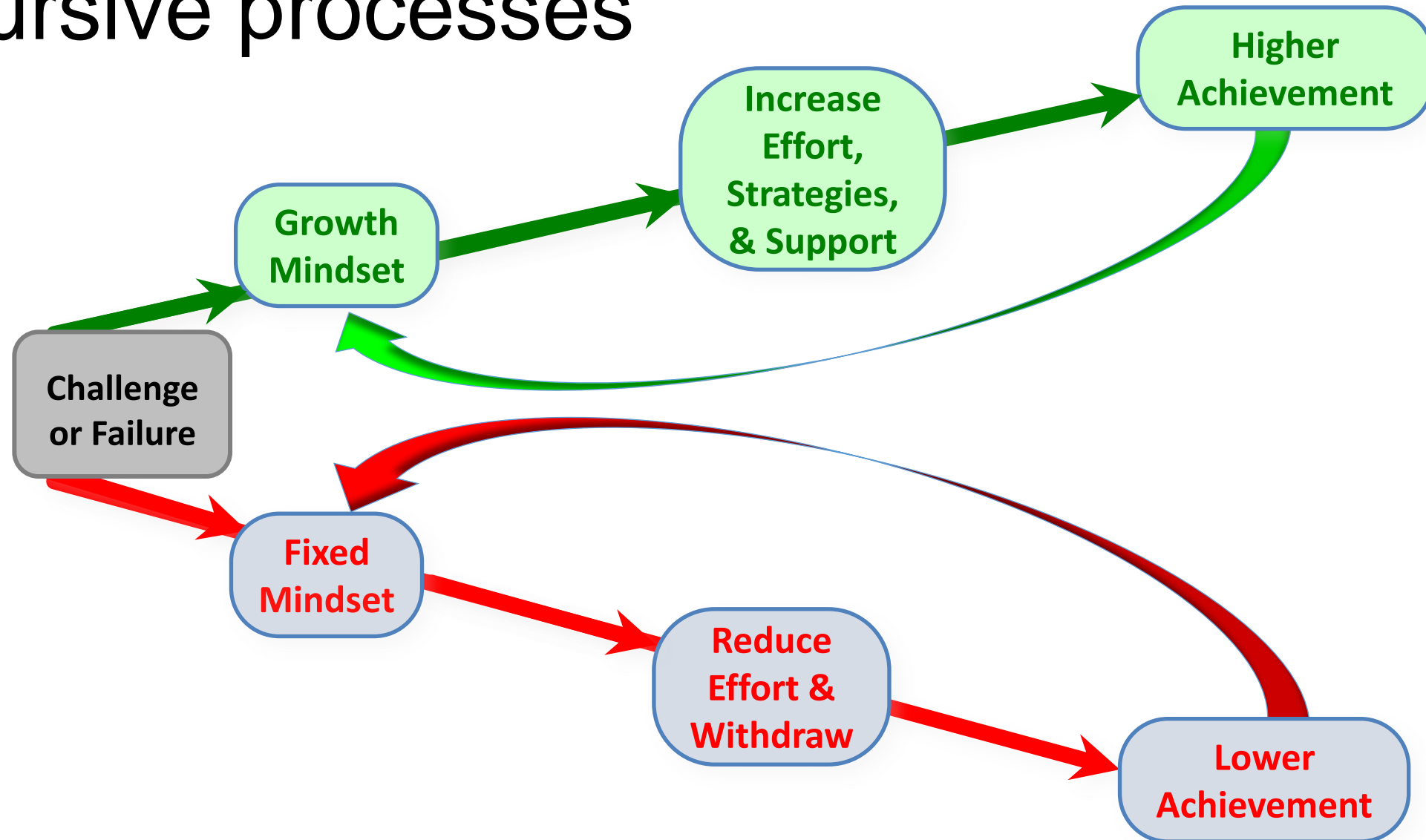
# Results

Completion: Percent of students who earned an associate's degree or transferred after two years





# Recursive processes





# Results: in students' own words

*“Intelligence is not just something you are born with. Your brain is a muscle and if you work it correctly and challenge it... it will become stronger just like any other muscle. Working out your brain and making it stronger and smarter is not easy. You must use effective studying tips to do this. If you need help you can ask a teacher a tutor or a fellow student for help.”*



# What's next?

## This program is ready to go!!







# Growth Mindset for College Students

A free, evidence-based program designed to increase students' engagement, motivation, and ultimately success by laying the foundation for a growth mindset



0 / 50

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SPOTS FILLED FOR *FALL 2017*

**GET STARTED**

Already registered? Sign in



# Sign up at **perts.net**



## *Easy to Implement.*

- Opens for participation from August 1<sup>st</sup> through October 15<sup>th</sup> 2017.
- Students participate as part of new student orientation or a first year experience course.
- Takes colleges ~2 weeks to finalize logistics internally, and less than 60 minutes to register.



# How It Works



## 1. Learn & Discuss

Download the [Program Information Packet](#) to learn how participation works.



## 2. Sign-up

Create a user account, submit a letter of agreement, and prepare to participate using our online platform.



## 3. Participate

Students complete a 30-min web module during new student orientation or a first year experience class.



## 4. Track Impact

See how many students completed the program, and receive a report about the program's impact at your school.



# Everything about **mindset**.

The Mindset Kit is a free set of online lessons and practices designed to help you teach and foster adaptive beliefs about learning.

[Learn more](#)

New! Introducing the Belonging for Educators Course

[Get started ▶](#)

## GROWTH MINDSET FOR EDUCATORS



### About Growth Mindset

Learn about what a growth mindset is and why it's important.



### Teaching a Growth Mindset

Learn how to talk to students about the brain, and download a growth mindset lesson plan.



### Praise the Process, Not the Person

Learn about the kind of praise that promotes a growth mindset, and see it in action.

## Popular Resources

Try these favorite resources from our community.



### Handout – How To Be a Great Mentor

This handout is a supplement to the Mentor Toolkit and reviews some of the core elements of being the type of mentor that can best deliver messages around mindsets.



### Seven Common Growth Mindset Scenarios and Responses

This handout provides seven common scenarios that mentors might encounter when supporting a student around



**ACTIVITY!**

**Growth Mindset Scenarios Worksheet (College)**