Welcome

- **Introduce yourselves.**
  - Share who you are, where you are from, and one hope you have for this school year.

- **Ask and answer questions.**
  - Use the chat function to pose questions of our panelists. All attendees are encouraged to respond.
  - We will leave time for our panelists to answer questions.

- **Share your learning.**
  - Tell your colleagues what you are learning. Use #Aurora2020 on Twitter and mention @Aurora_Inst.

- **We are recording and archiving the webinar.**
  - The slides and video will be available on **aurora-institute.org**.

Chan Zuckerberg Education Initiative

The Science Behind Motivation: Strategies to Motivate Students & Staff
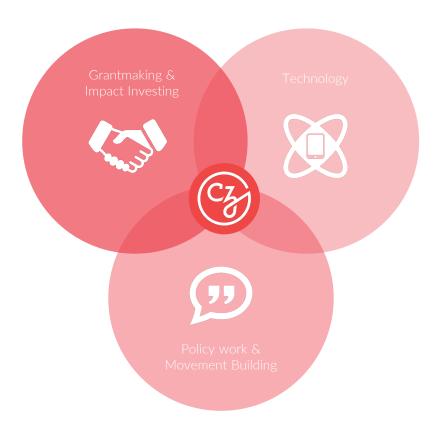
Julio Chow-Gamboa
Senior Manager, Educator Capacity

Katrina Stevens
Director, Learning Sciences

September 29, 2020

Overview of CZI

While we use tech to empower, we also know we all need to work together to have the most impact

Collaboration is the tool

Grantmaking & Impact Investing

Technology

Policy work & Movement Building

Chan Zuckerberg Education Initiative

Chan Zuckerberg Science Initiative

Chan Zuckerberg Justice & Opportunity Initiative

Technology | Engagement, Communications | Operations

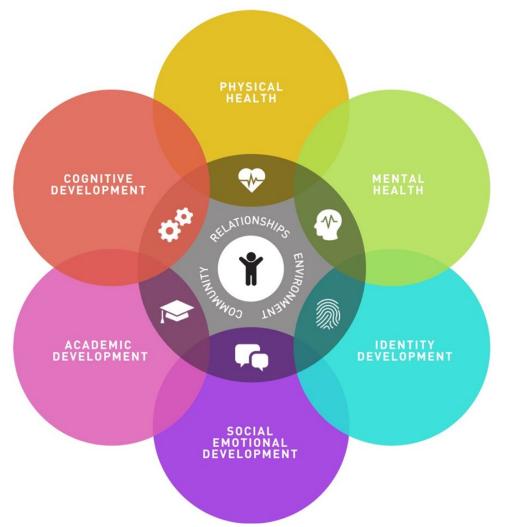# Chan Zuckerberg Education Initiative

Our Vision at CZI Education is to

ensure that every young person enters adulthood with the knowledge, skills, habits, and agency to thrive in a changing world.

All
Means
All

Our approach

Recognizing that academic success alone is not enough, we need to pursue a broadened conception of success for all students
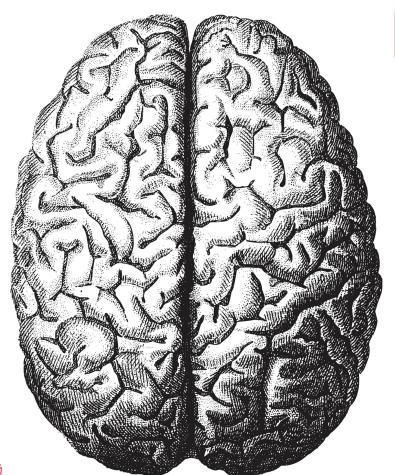
Let's hear from you!

1) Take the 3-question poll.
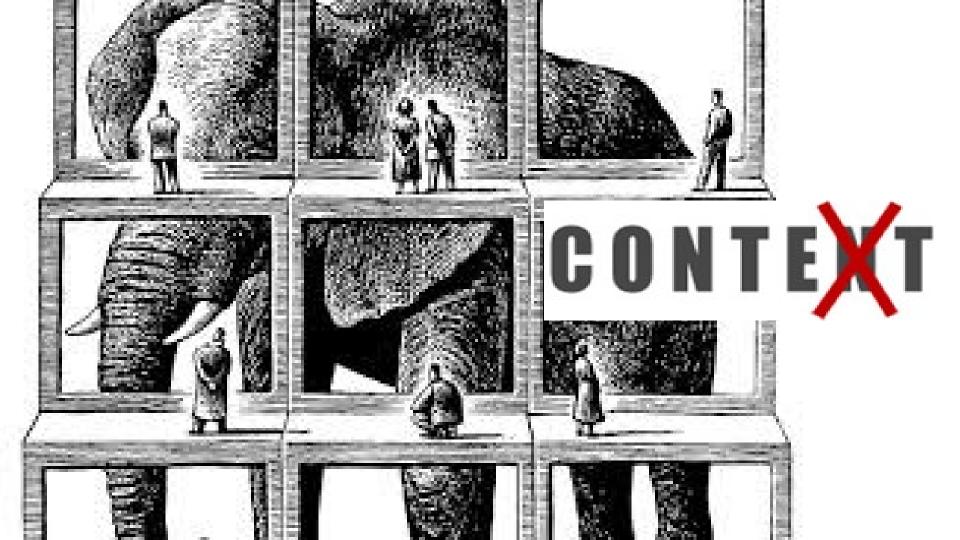2) In the chat, share your name, your role and where you are located.

New world of work & life means we need

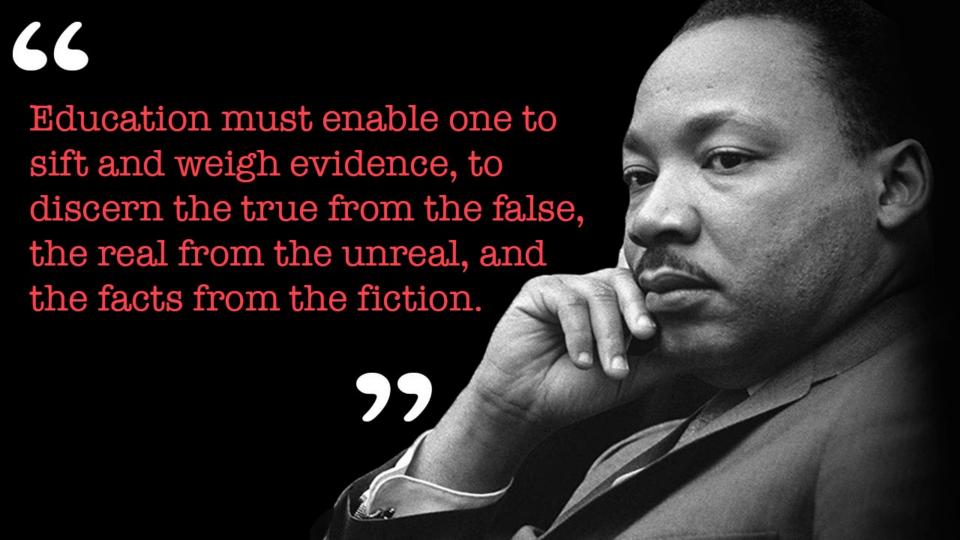**Learning Science**
=
science of how people learn

CONTEXT

"

Education must enable one to sift and weigh evidence, to discern the true from the false, the real from the unreal, and the facts from the fiction.
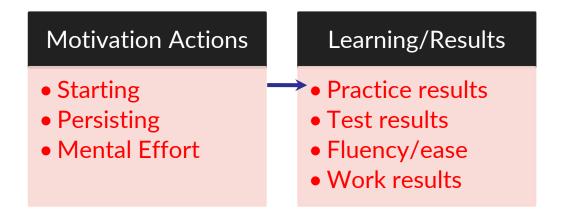
"

Engagement ≠ motivation

Engagement ≠ learning

* Clark, R. E., Saxberg, B., "Engineering Motivation Using the Belief-Expectancy-Control Framework," **Interdisciplinary Education and Psychology**, 2(1), 4-32, 2018

We know quite a bit about motivation.

Motivation Actions	Learning/Results
• Starting • Persisting • Mental Effort	• Practice results • Test results • Fluency/ease • Work results

* Clark, R. E., Saxberg, B., "Engineering Motivation Using the Belief-Expectancy-Control Framework," **Interdisciplinary Education and Psychology**, 2(1), 4-32, 2018

Barriers to Motivation

Confidence	You just don't think you can master it. "I can't do it."
Value	You don't value what you're learning or how you're learning enough to put in effort. "I'll never use this."
Unexpected Negative Events	You blame something in your environment for preventing you from starting. "My teacher doesn't care about me."
Negative emotions	You are angry, depressed, scared, etc.

Clark, R. E., & Saxberg, B. (2018). Engineering Motivation Using the Belief-Expectancy-Control Framework. Interdisciplinary Education and Psychology, 2(1), 4.

Share with each other

Directions: Introduce yourself and share one thing that resonates or that you have learned so far.

Simplified Motivation Strategy Observation Tool

Observed Practice or Strategy What did the teacher do?	Confidence "Can I do this?"	Value "Do I want to do this?	Unexpected Negative Events "I can't do/learn this because…"	Negative Emotions "I don't feel good, so I can't learn…"

Application to an *almost-real* classroom

Directions: Watch excerpts from *Mr. Holland's Opus*.

1. *Watch first 4.5 mins*: Identify [on your sheet](#) examples of "good practice" relating to the motivational framework.

1. **Discuss** in your Zoom breakout room the strategies which people saw.

2. *Watch last 4 mins*: Identify additional practices you see.

3. **Discuss** in your Zoom breakout room the strategies which people saw.

Source video: https://www.youtube.com/watch?v=aN7f2yDYn78
Scenes from Herek, S., Dreyfuss, R., Headly, G., Thomas, J., Dukakis, O., Duncan, P. S., Field, T., ... Charlie Mopic Company. (1995). *Mr. Holland's opus*. Place of publication not identified: Hollywood Pictures Home Video.

Share with each other

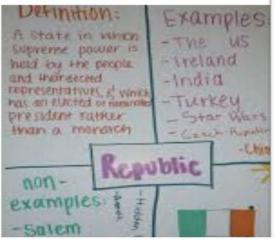Directions: What strategies or teacher practices did you see?

Students (and adults) need a sense of control, especially in these uncertain times.
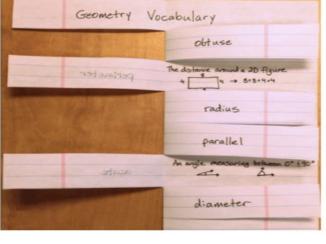
"Diagnosing and treating" motivation challenges helps students feel like they have more control over their learning.

Problems with:	E.g.:	Approaches to resolve
Confidence	"I can't do this."	Show they have done things like this before Show stories from others *like them* with this issue who were successful Emphasize effort Help them develop a strategy for when they're stuck Emphasize a growth mindset, help them reframe: "I can't do this *yet...*" Reinforce that they're not helpless Teach study strategies and create opportunities for students to reflect on how these strategies impacted performance.
Value	"I don't see the point"	Help learner find value Use real-world examples tailored for students Give learners choices Let learner use their existing expertise Show examples of people who look like them doing related work Connect to individual interests and experiences Make the activity itself enjoyable - this is where engagement can be useful Show enthusiasm!

Vocabulary

"Diagnosing and treating" motivation challenges helps students feel like they have more control over their learning.

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"Diagnosing and treating" motivation challenges helps students feel like they have more control over their learning.

Problems with:	E.g.:	Approaches to resolve
Unexpected Negative Events	"\<Something\> is in my way."	Look for controllable causes and make plans to address them - model how to problem-solve: What can you/we do to solve this issue? (Space to work? Time? Internet access? materials?) Provide opportunities for revision cycles Teach study strategies and create opportunities for students to reflect on how these strategies impacted performance. Show them you care.
Negative Emotions	"I'm \<angry/depressed/ scared/anxious.\>"	Wide array of possible solutions, from structured conversation techniques through more professional help. Create a supportive learning environment and sense of belonging Active listening Take time to know students' interests, opinions Stress improvement over time Encourage questions, make is safe to make mistakes

Student choice/agency

Teacher/student connection

Familiar routine that creates a sense of belonging

You may have to adjust in a Covid world, but you still have options

Student choice/agency

Teacher/student connection

Familiar routine that creates a sense of belonging

"Diagnosing and treating" motivation challenges helps students feel like they have more control over their learning.

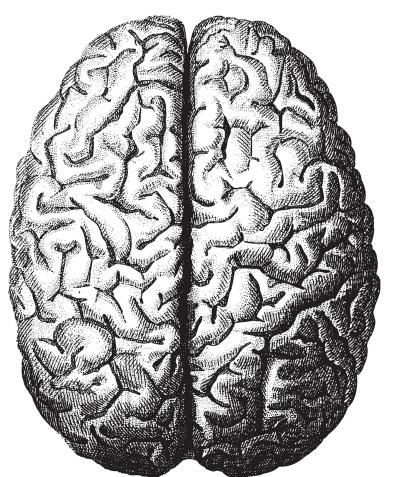| Problems with:	E.g.:	Approaches to resolve
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Let's put this all together…

Motivation Beliefs		Motivation Actions		Learning/Results
• Value • Confidence • Unexpected Negative Events • Mood	→	• Starting • Persisting • Mental Effort	→	• Practice results • Test results • Fluency/ease • Work results

* Clark, R. E., Saxberg, B., "Engineering Motivation Using the Belief-Expectancy-Control Framework," **Interdisciplinary Education and Psychology**, 2(1), 4-32, 2018

Adults have brains too!

Where to go for more...

How learning works:

- *Why Don't Students Like School?* (Daniel Willingham)
- Neuroteach Global
- Transcend Education's Designing for Learning Primer
- *Learning as a Generative Activity: Eight Learning Strategies that Promote Understanding* (Logan Fiorella and Richard Mayer)
- *E-Learning and the Science of Instruction* (Richard Mayer and Ruth Clark)
- "Engineering Motivation" (Richard Clark & Bror Saxberg)

How to support and help motivate students:

- Healthy Minds app
- CCSSO's Restart and Recovery: Supporting SEL and Mental Health During Covid-19
- AASA and CASEL's Districtwide SEL Essentials for Superintendents Toolkit
- CASEL's Reunite, Renew, and Thrive: Social and Emotional Learning (SEL) Roadmap for Reopening School
- CZI partners addressing persistent disparities as schools move online.
- CZI partners supporting back-to-school focus on student well-being.

Thank you.

Quick Feedback

One-Minute Survey: https://www.surveymonkey.com/r/AuroraWebinar_9-29-20

Pre-Symposium Webinar Series

1. **Developing Equity, Efficacy, and Effectiveness in a Competency-Based System** | October 1, 2020 | 2 pm ET
2. **Building Educator Capacity for Equity: Competency-Based Approaches to Professional Learning for Teachers and Administrators** | October 5, 2020 | 2 pm ET
3. **Impact of Personalized Learning through Interest-Based Internships** | October 6, 2020 | 2 pm ET
4. **Improving the Equity in Personalized Learning through a Multi-Tiered System of Support (MTSS) Approach** | October 8, 2020 | 2 pm ET
5. **Implementing Student-Centered Learning: Lessons Learned from Leaders in the Arena** | October 13, 2020 | 2 pm ET
6. **Lessons from COVID-19: How Competency-Based Education Provided for Continuity of Learning in Three North Carolina Schools and Is Shaping the Path Forward** | October 15, 2020 | 2 pm ET
7. **High School Internships in the Time of COVID-19: Mentorship, Connections, and More in Virtual Work-Based Learning** | October 19, 2020 | 2 pm ET
8. **Choice in Learning: Examination of Students' Use of Flex Time in High School** | October 22, 2020 | 2 pm ET
9. **Competency-Based Education Systems: Performance Assessment Using Proficiency Scales** | November 5, 2020 | 2 pm ET

https://aurora-institute.org/events-webinars/

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