What is active learning, and how can we organize for it in our schools and communities?

William R. Penuel

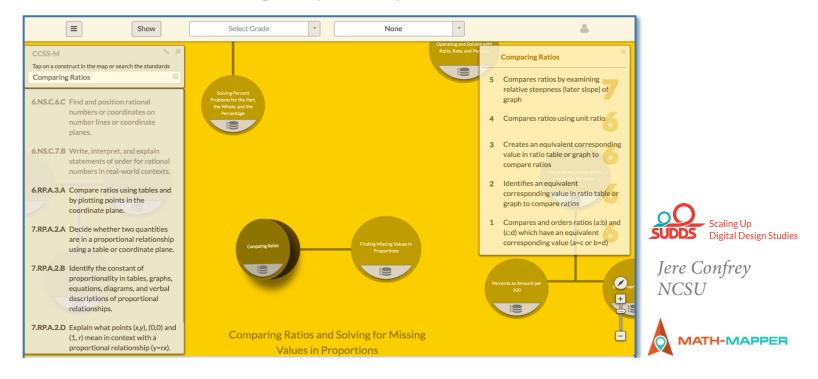
University of Colorado Boulder

@bpenuel, @learnDBIR, @NCRPP

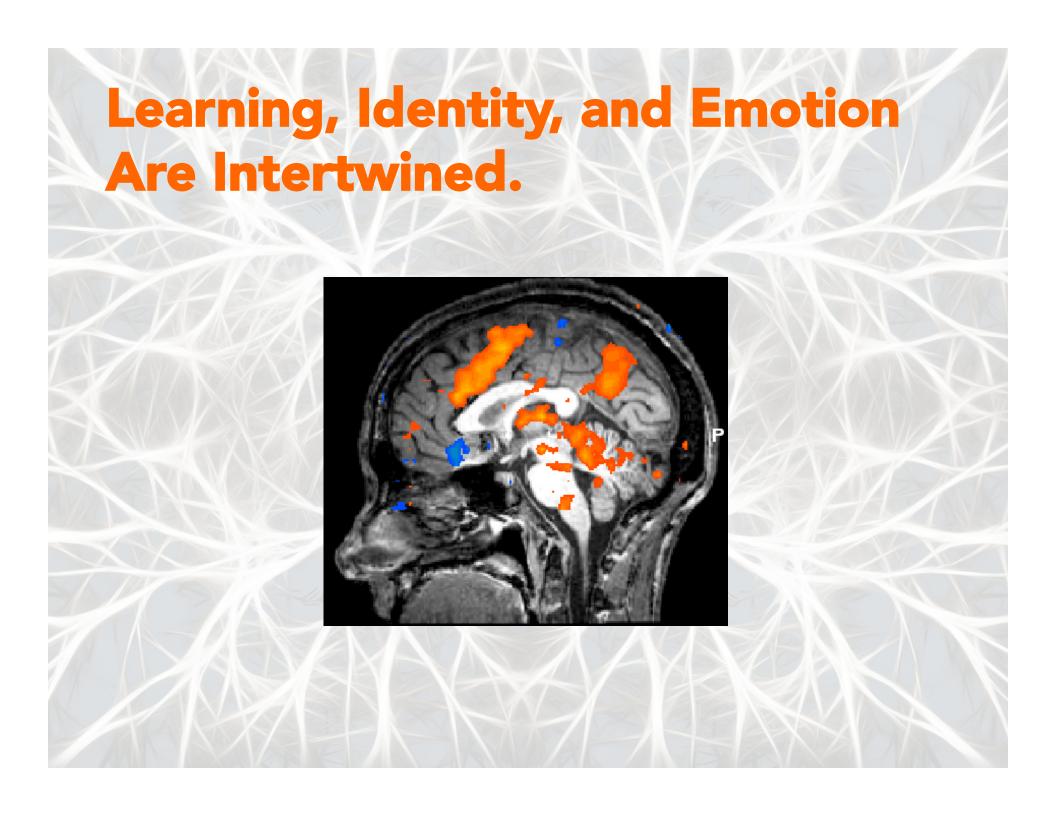
Learning Trajectories and Progressions

Focus on a few core ideas Support learning over years, not days Build on what students bring

A learning trajectory for ratio









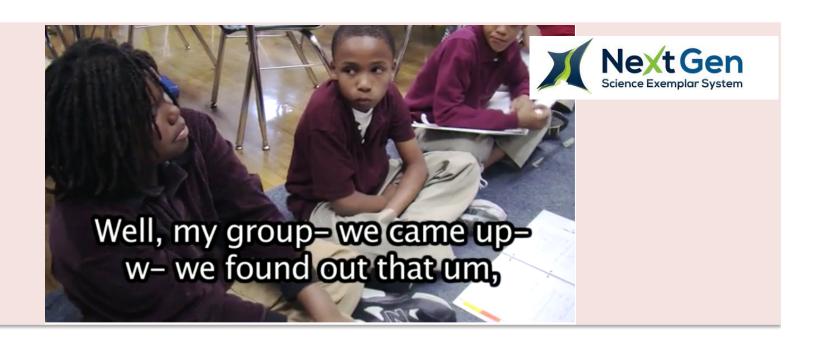
Accountable Talk
MATHEMATICS

SCIENCE Talk Moves

What ideas do we have?

In an active learning classroom....

- What are students doing?
- What is the teacher doing?
- What is the nature of the task?



Discussion: Your Ideas

What are some ideas we can work with that will be productive as we move through the day?

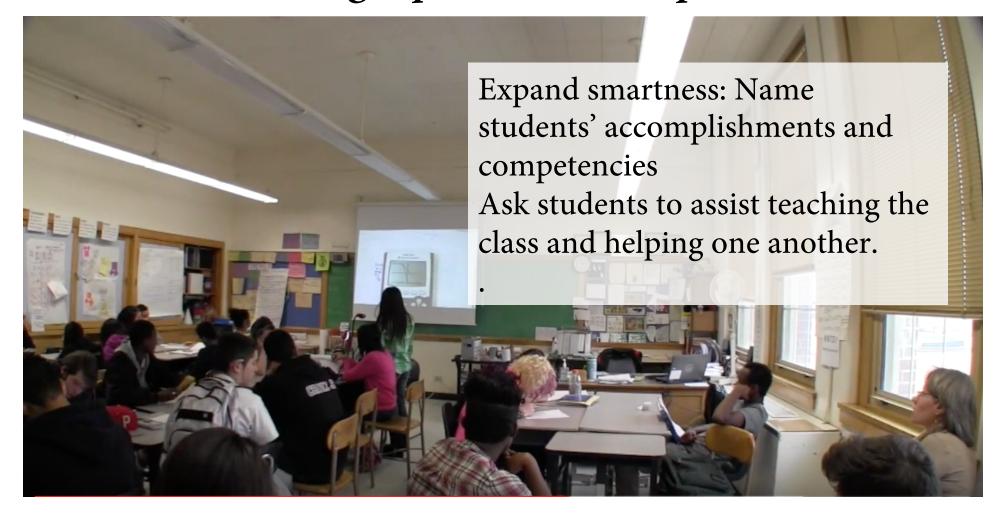
Some More Food for Thought

Promoting Equitable Participation



Some More Food for Thought

Promoting Equitable Participation



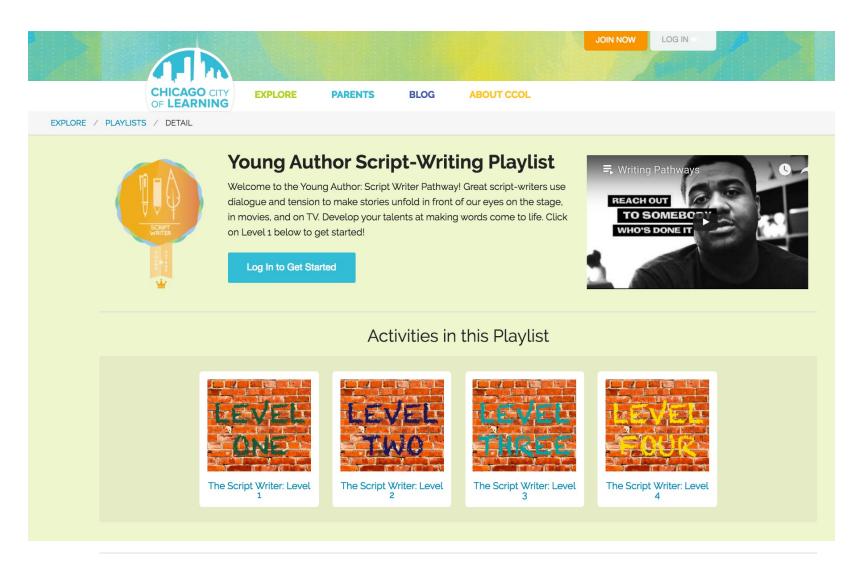


Connecting to Students' Interests and Experiences through "Citizen Engineering"

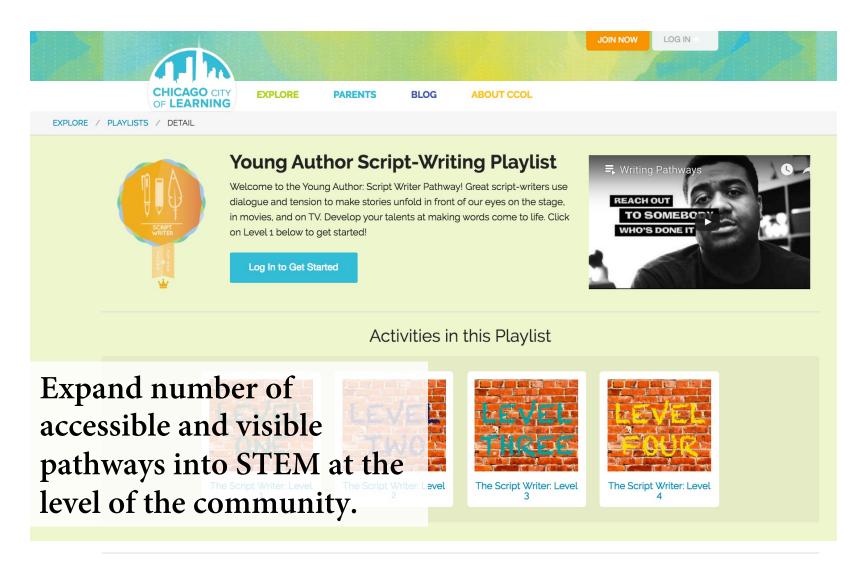


Connecting to Students' Interests and Experiences through "Citizen Engineering"

Taking an Ecosystem View of Equity: Chicago City of Learning



Taking an Ecosystem View of Equity: Chicago City of Learning



A Few Big Ideas

- Your ideas here
- Your ideas here
- Your ideas here
- Anchor learning in meaningful problems to solve and phenomena to explain.
- Connect learning to student interests, experiences, and the community.
- Support students in making sense of and building on others' ideas.
- Expand smartness: Name emerging capabilities of students.
- Ask students to assist teaching the class and helping one another.
- Expand number of accessible and visible pathways into STEM at the level of the community.

Our Call To Action

