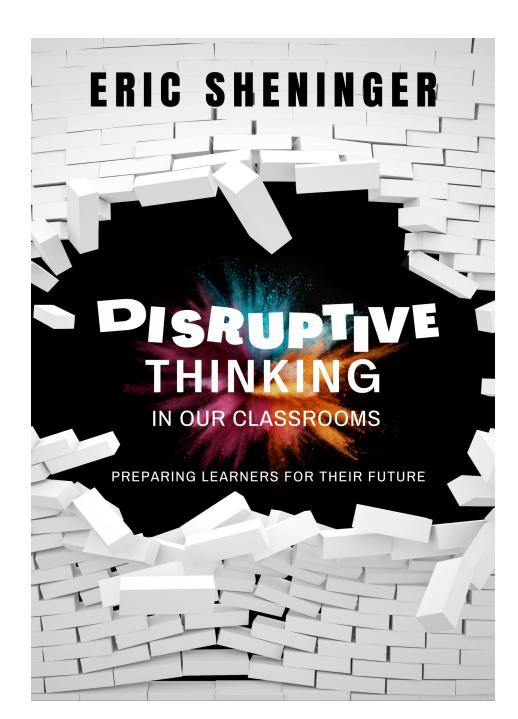
# Addressing the Needs of Learners in a Disruptive

World: Part 1

Eric Sheninger – Associate Partner Twitter @E\_Sheninger ericsheninger.com #DisruptiveThink





From Houghton Mifflin Harcourt.

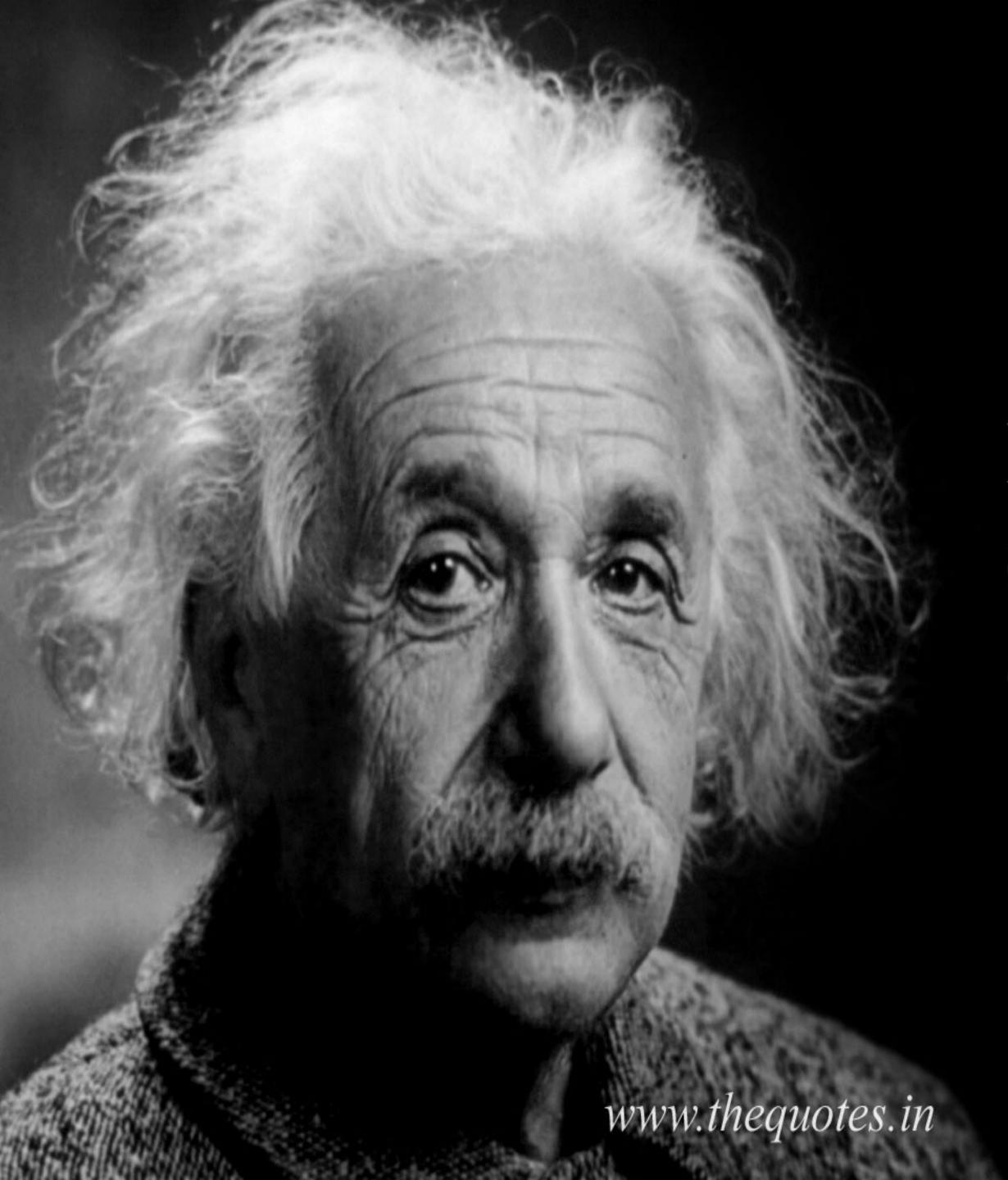




### #DisruptiveThink

Connect with me @E\_Sheninger





Insanity: doing the same thing over and over again and expecting different results.

Albert Einstein















60+ NEW BLOGS 168 MILLION EMAILS ARE SENT 1,500+ BLOG POSTS

694,445 SEARCH QUERIES

Google

Google Search

13,000+HOURS

MUSIC STREAMING ON PANDORA

IN

1,700+**Firefox** DOWNLOADS

695,000+ facebook. STATUS UPDATES

79,364 WALL POSTS

510,040 COMMENTS



98,000+ TWEETS

Craigslist Ads

12,000+

NEW ADS POSTED ON craigslist

320 +NEW LWILLER ACCOUNTS

370,000 + MINUTES

**VOICE CALLS ON** 

skype

100 +NEW Linked in ACCOUNTS

associatedcontent

ARTICLE IS PUBLISHED

6,600+NEW
PICTURES ARE
UPLOADED ON
flickr

50+ WORDPRESS DOWNLOADS





in

in

=125+ PLUGIN DOWNLOADS

WORLD'S

LARGEST

COMMUNITY

CREATED CONTENT!

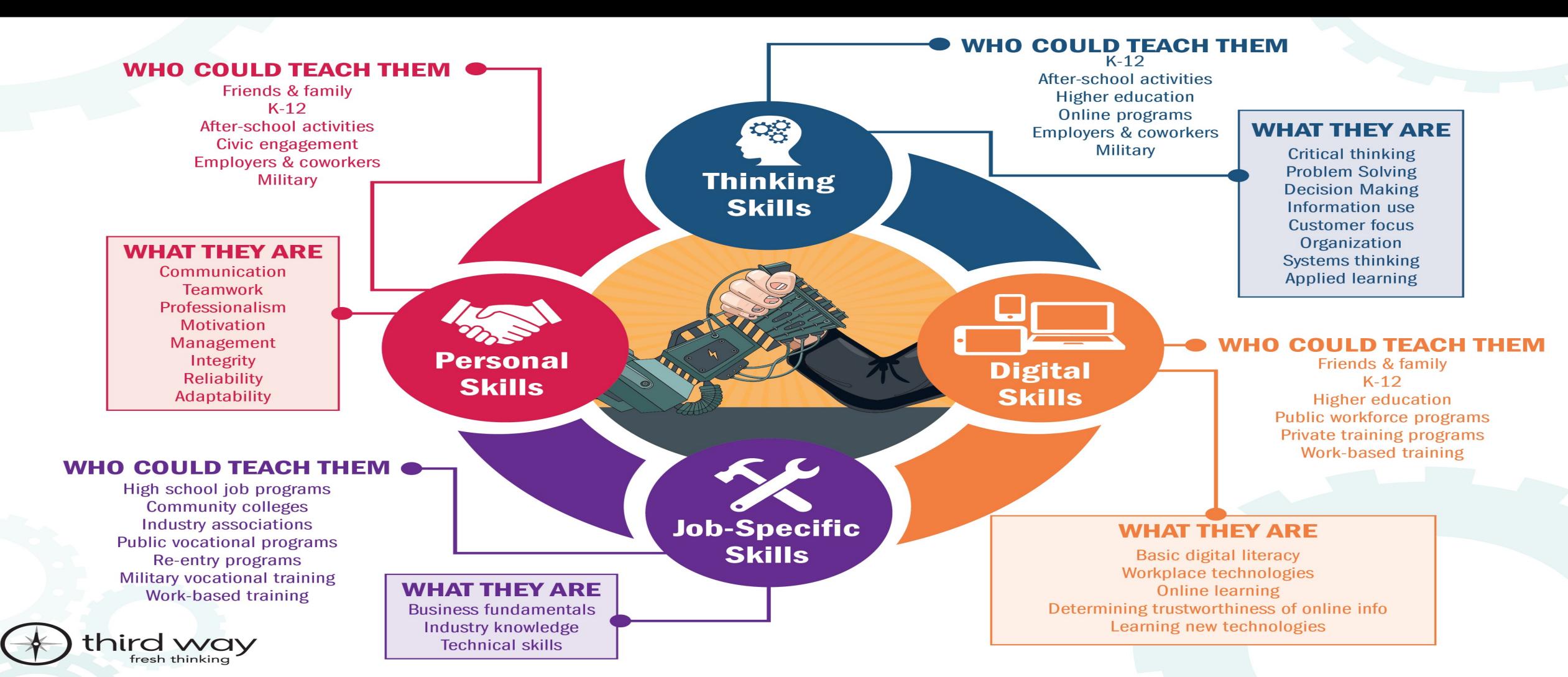




### AUTONATETHS

The Skills People Need to Compete in the Digital Economy, and Who Could Teach Them

The coming wave of automation does not mean we need to do away with the concept of working for a living—it means we need to upskill our workforce so Americans can compete and succeed in the new economy. We need to leverage the many places people learn to ensure workers develop the four types of skills they'll need to face off with robots—and win.



	First Industrial Revolution	Fourth Industrial Revolution
Learning Objectives	Mastery of basic skills and knowledge (e.g., reading, math)	Development of whole person across multiple intelligences (e.g., emotional, intellectual, social)
Role of Educator	Expert	Facilitator
Learner Experience	`Factory model' - Passive, structured, directed, en masse	`Custom model' - Active, self-directed, exploratory
Target Age	K-12	Lifelong learning
Expertise	"Teacher knows best"	"Anyone can teach"
Access	Physical classroom	Anytime, anywhere, any device

#DisruptiveThink



From Houghton Mifflin Harcourt

Where does the culture of your school(s) fit into each of these categories and why? Think about the evidence you have to support your response. Explain what needs to happen to make needed shifts to practice that aligns with the 4th Industrial Revolution.



	First Industrial Revolution	Fourth Industrial Revolution
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#### Pit to Peach: Challenges Create Opportunities

Fostering resilience

Mastering blended pedagogies

Varying engagement strategies

Growing relationships with learners and families

CHALLENGES

Mental health

Student
disengagement
Screen fatigue

Family engagement Relationship-building struggles

Time management issues

Convoluted grading

Equity

**Ensuring** equity

Providing innovative discourse and collaboration strategies

Using time effectively to plan, teach, and grow

Applying purposeful use of technology at scale

Eric Sheninger (@E\_Sheninger)
Image created by @RigorRelevance

# If you are still trying to figure things out don't worry because we all are.



# The Guardian



### Pandemic Lessons to Drive Change



Personalized Learning Works

lt's an important step toward equitable learning.



It's OK to Break the Mold

Embracing innovative learning means changing our ways.



Infrastructure Matters

PPE, Wi-Fi, devices, flexible environments are non-negotiables.



An LMS is Vital

It helps ensure quality and continuity during any experience.



People Need People

Learning must involve interaction and collaboration.



Continuous Improvement is a Must

Leaders and teachers must always be improving.



Time is Fluid

Innovate with time allocation; don't let old routines dictate practices.



Well-Being First

Self-care and caring for others in need are requisites for learning.



## The Elements of Change Leadership





clarifies goals, outcomes, success measures



Communication

ensures the right info, the right time, the right way

#### **Professional** Learning

establishes supports for success





**Environment** 

creates a safe space for taking action

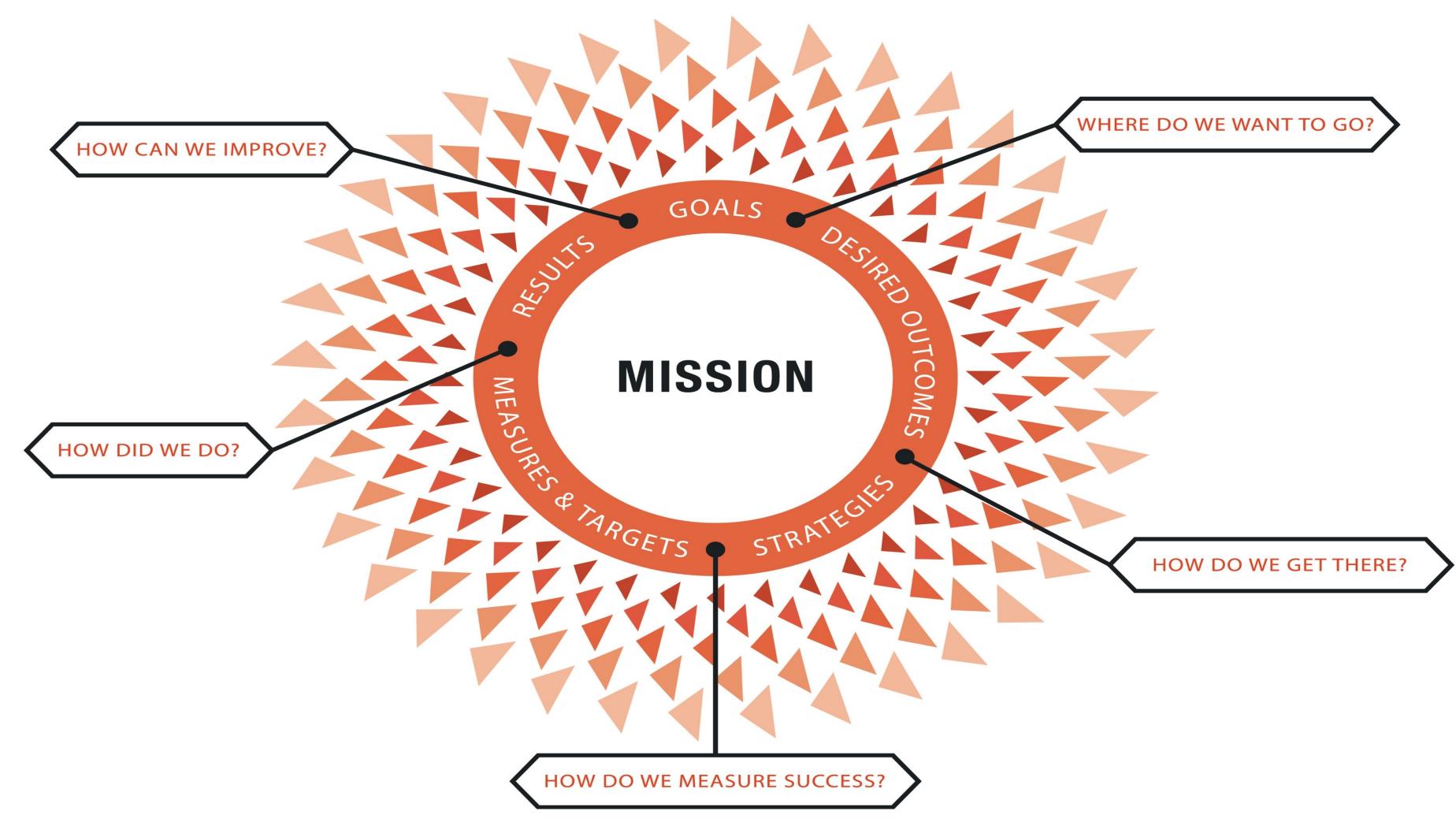
#### People

provide the foundation for implementing change





#### STRATEGIC PLANNING CYCLE





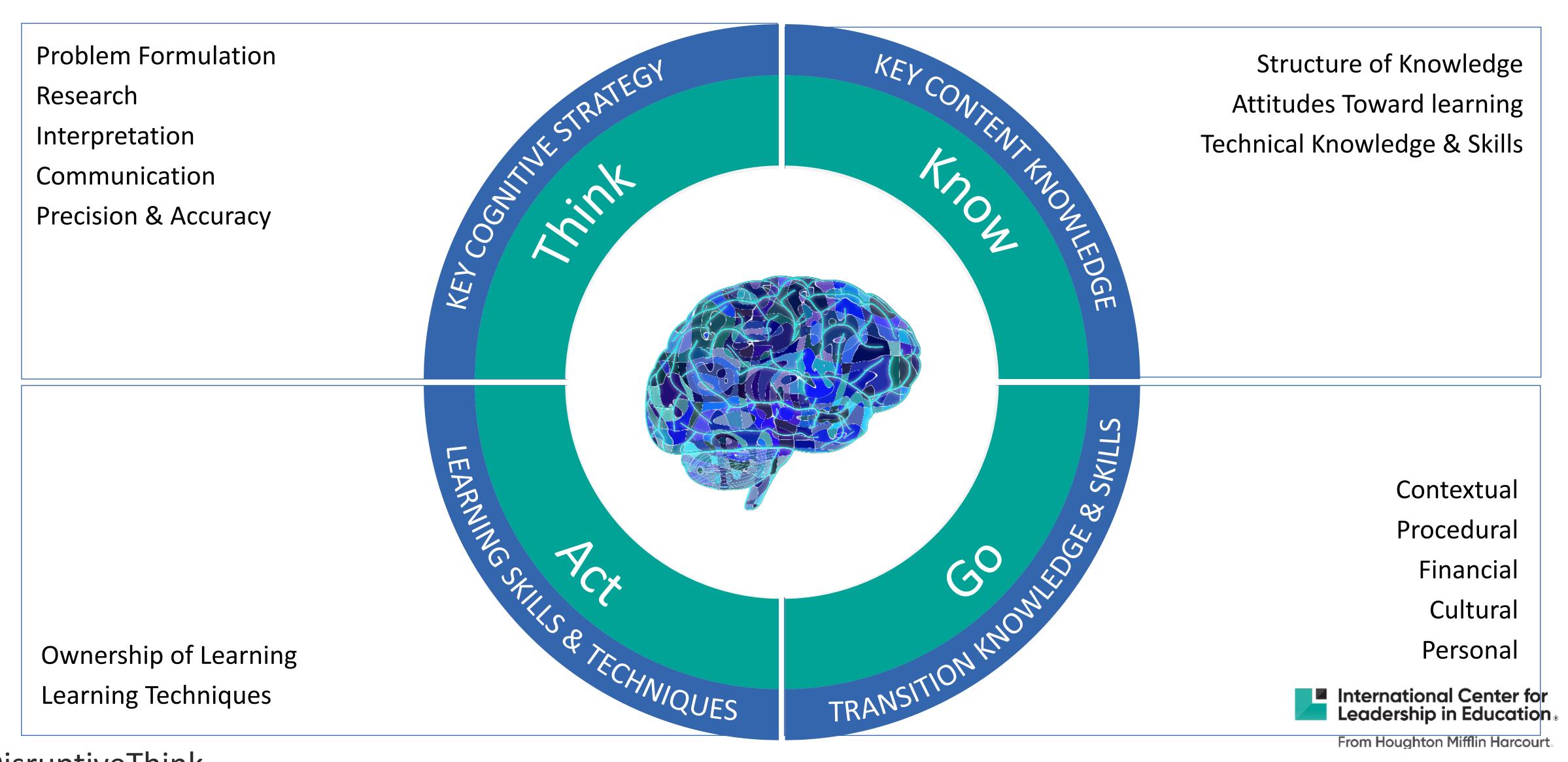


# Providing What Learners Really Need





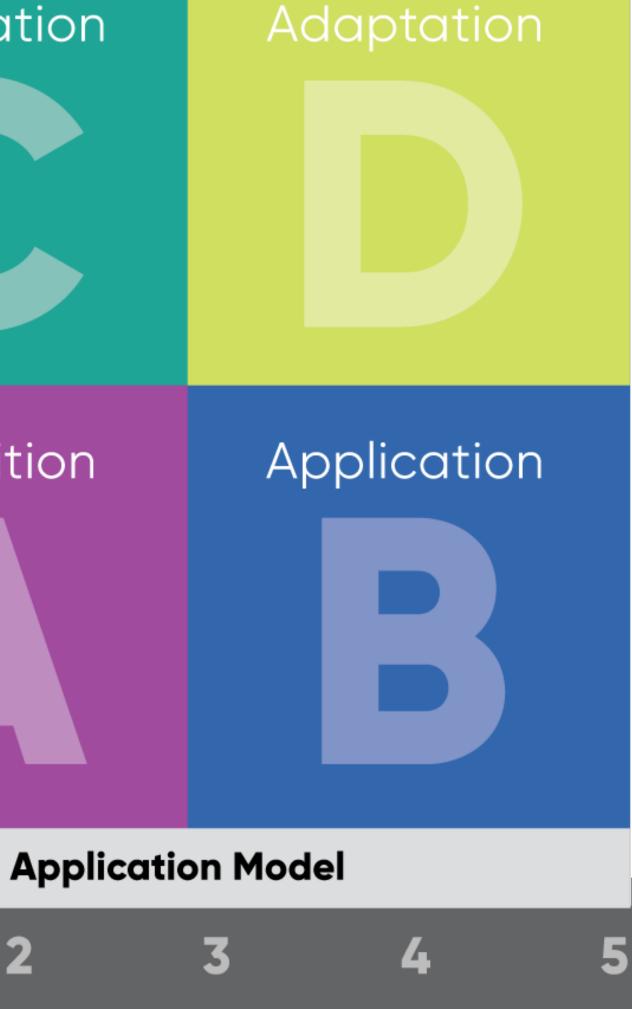
#### Four Keys to College and Career Readiness



#### Rigor/Relevance Assimilation Framework® 5 **Evaluating** Taxonomy 4 **Analyzing** Knowledge Acquisition **Applying**

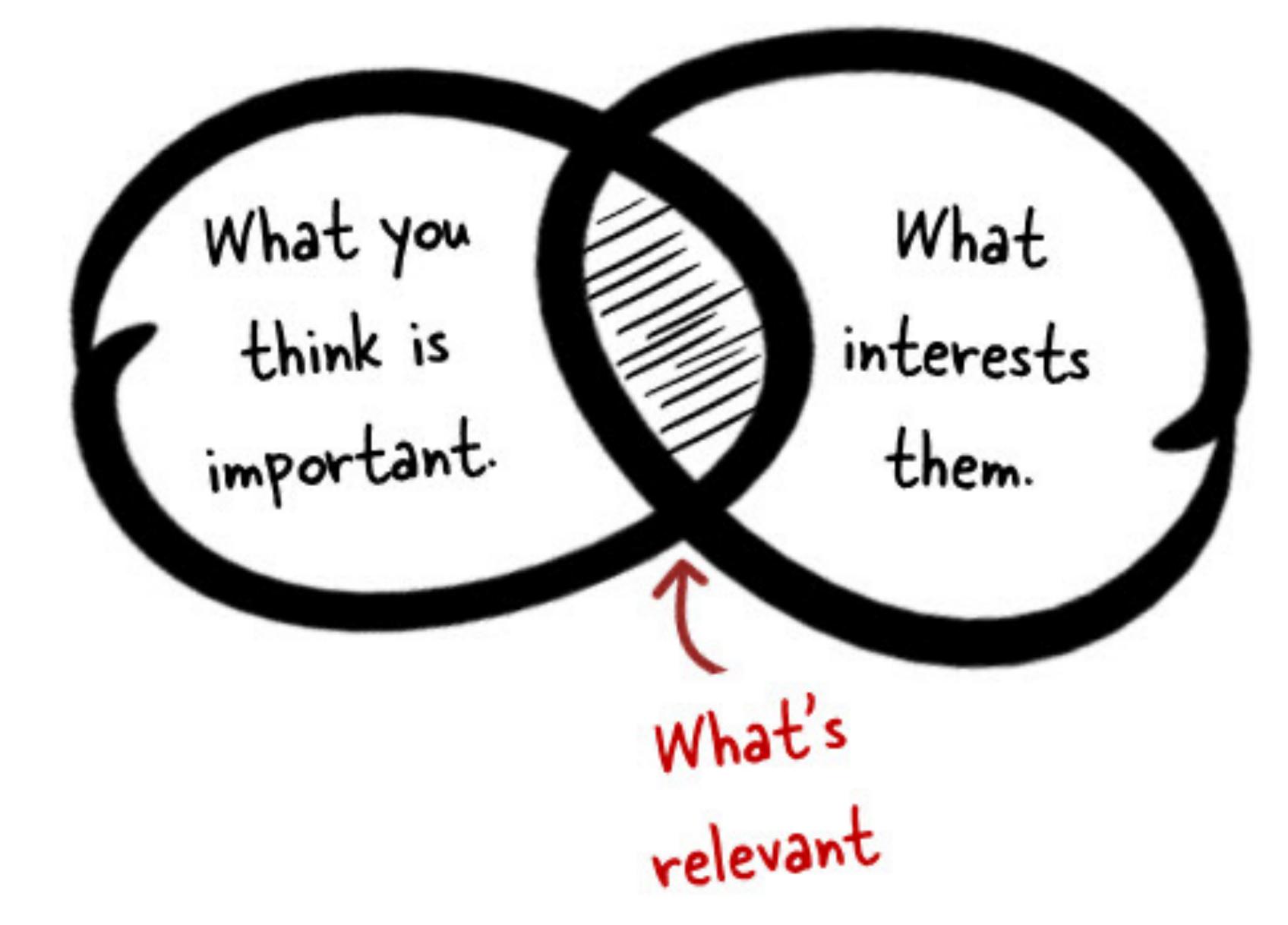
Understanding

Remembering











#### Relevance is the Purpose of the Learning

ACQUIRE KNOWLEDGE

APPLY KNOWLEDGE

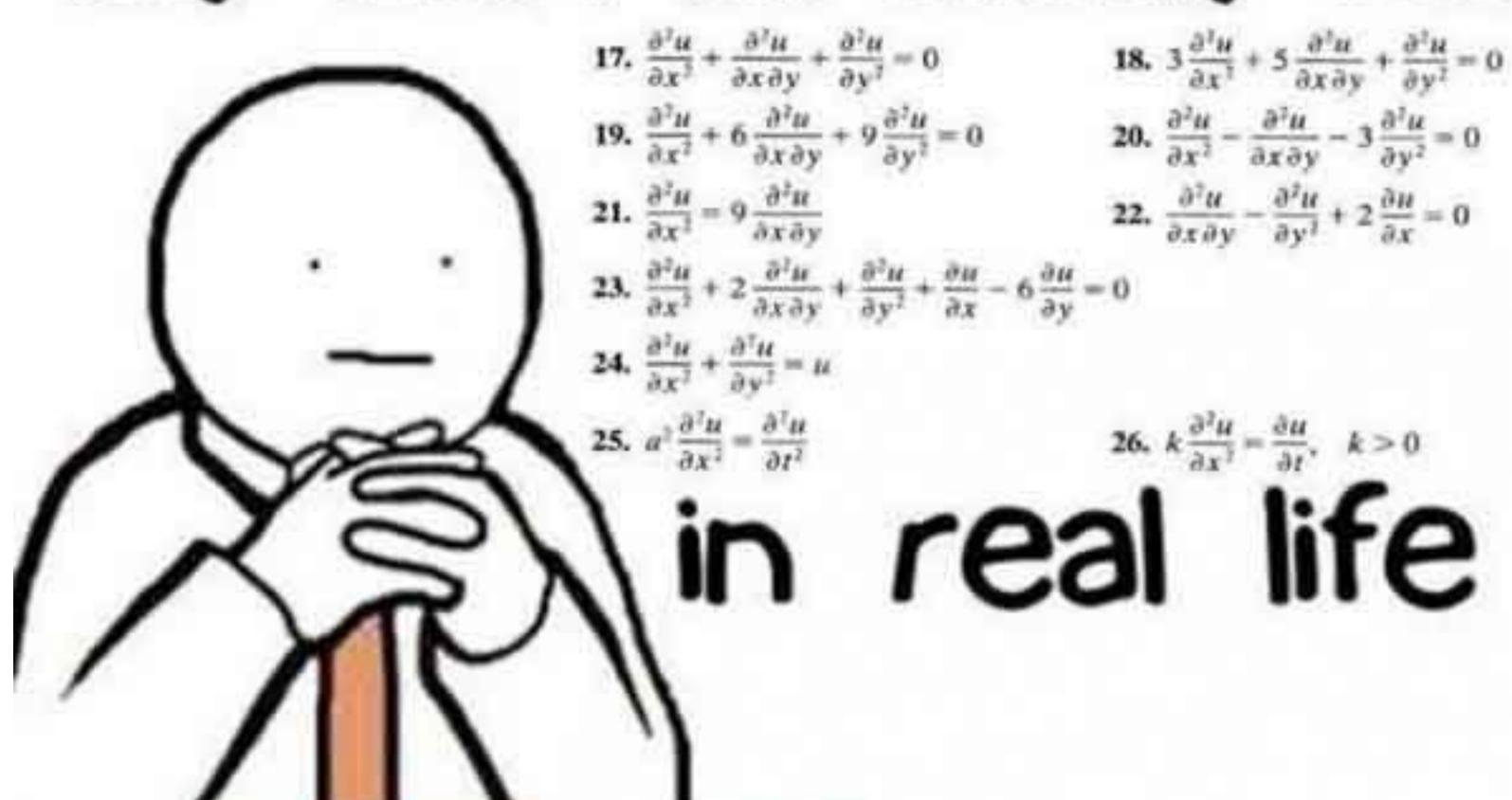
INTERDISCIPLINARY

REAL WORLD PREDICTABLE

REAL WORLD UNPREDICTABLE



# I'm still waiting for the day that I will actually use



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H I N K
HINKI
HINKI
HINKING

What did you observe...?

What else can you tell me about...?

	How would you design ato?	How could you teach that to others?
LEVEL	How would you compose a song about?	If you had access to all resources, how would you deal with?
4	How would you rewrite the ending to the story?	What new and unusual invention would you create for?
	What would be different today, if that event occured as?	What authentic solution can develop to solve this problem?
	Can you see a possible solution to?	Can you predict what will happen next and why?
	How are these similar/different?	Why didchanges occur?
. =>.==	How is this like?	What is a better solution to?
LEVEL 3	What's another way we could say/explain/express that?	How would you defend your position about that?
	What do you think are some reasons/causes that?	
	Would you do that?	How would you illustrate that?
LEVEL	Where will you use that knowledge?	How would you interpret that?
	How does that relate to your experience?	How would you collect that data?
2	What observations relate to?	How do you know it works?
	Where would you locate that information?	
	What is/are?	What does it mean?
	How many?	What can you recall?
LEVEL	How do/does?	Where did you find that?

Who is/are...?

How would you define that in your own terms?

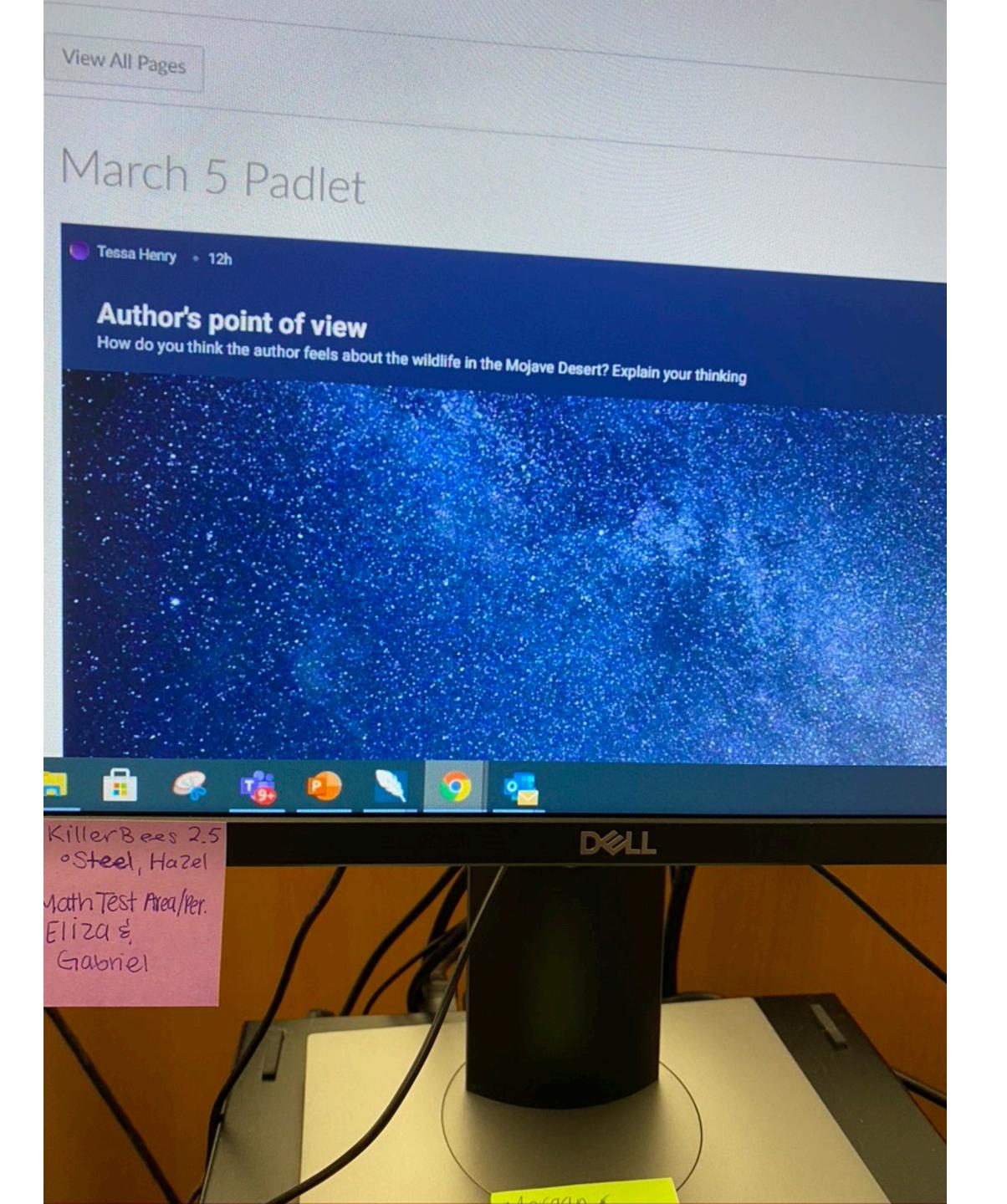
### Seesaw Text Features Scavenger Hunt



Use any non-fiction book to complete the text features scavenger hunt! Put a check next to each task once you have completed it!

- 1. Find a photograph and take a picture. Label the picture with text explaining what the photograph is teaching you. \_\_\_\_\_
- 2. Find the table of contents. Take a video of the table of contents which shows you turning to the different chapters/headings in the book. \_\_\_\_\_
- 4. Find a diagram with labels. Using the draw tool, underline all of the labels. Label the diagram with text explaining what the diagram is teaching you. \_\_\_\_\_
- 5. Find the glossary and pick one bold print word. Take a video of yourself reading the word and the definition. Label the video with text explaining why the author might have put that word in the glossary. \_\_\_\_\_\_
- 6. Find the index and find a word with the page number of where to find it. Take a video of yourself finding the word/topic in the text. \_\_\_\_\_

\* Bonus- Find a time line, map, or subheading in a non-fiction book!





Evon Lloy

FEATURE	Why Was This A Feature Of The Articles of Confederation	Possible Problems with This Feature
Congress did not have the power to draft an army (could only request states to send troops)	50 prope werest forsel to pight	They could have small numbers of soldiers
No National Court System	The Ring purished intoperable socts	problems byonly
Any amendments (changes) to the Articles must be approved by all 13 states	Everyone has a soll	to possomerines
Congress did not have the power to collect state debts owed to the federal government	They also mot home to user about debts	room ore world poor the lebt.



Scene #1

U.S. Capitol Building -- Washington, D.C.



Security guards were surpised to learn that Neo Eigenvector apparently made copies of Top Secret government files which may expedite the building of a World Conquering Device. In the Senate restroom, police found this note written on a stall.

Welcome to the Matrix of Matrices. I will free your mind. But first I must frustrate my mind and journey to Congress, where I overheard this exchange... "I can create more complicated meandering square matrices than you!" yells the House. "Wanna bet?" the Senate replies, "My determinant will be bigger than your determinant!!"

$$A = \begin{bmatrix} 2 & 1 \\ 2 & 4 \end{bmatrix} \qquad B = \begin{bmatrix} 5 & 0 \\ 0 & 5 \end{bmatrix}$$

$$C = \begin{bmatrix} 10 & 6 & 0 \\ 2 & -3 & 5 \end{bmatrix}$$
  $D = \begin{bmatrix} -8 & -3 & -2 \\ -1 & -4 & 6 \end{bmatrix}$ 

$$E = \begin{bmatrix} 4 & 3 \\ -1 & 2 \\ 5 & -9 \end{bmatrix} \qquad F = \begin{bmatrix} 0 & -7 \\ 5 & 1 \\ 2 & -2 \end{bmatrix}$$

Do these operations create possible matrices? What is the determinant?

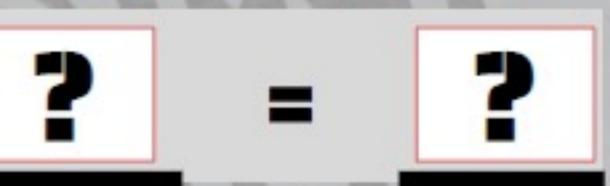
WORKSPACE (Click to add text)

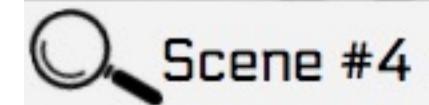
WORKSPACE (Click to add text)

A clue for the Cryptic Text Message

Neither is Possible

w=0





#### Smithsonian Museum of Natural History -- Washington, D.C.



Posing as an ordinary tourist, Neo Eigenvector stole the femur of an adult apatosaurus.



Despite popular belief, there is not a treasure map on the back of the Declaration of Independence. However after a little inspection, there is a 4x4 determinant problem doodled by Ben Franklin. Don't believe me? Go see for yourself. Solve this monster determinant to get your next clue.

#### WORKSPACE (Click to add text)

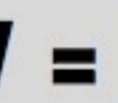
10	7	-7	5
-9	0	2	-1
3	-3	1	-4
-1	8	5	2

WORKSPACE (Click to add text)

W = the determinant

A clue for the Cryptic Text Message





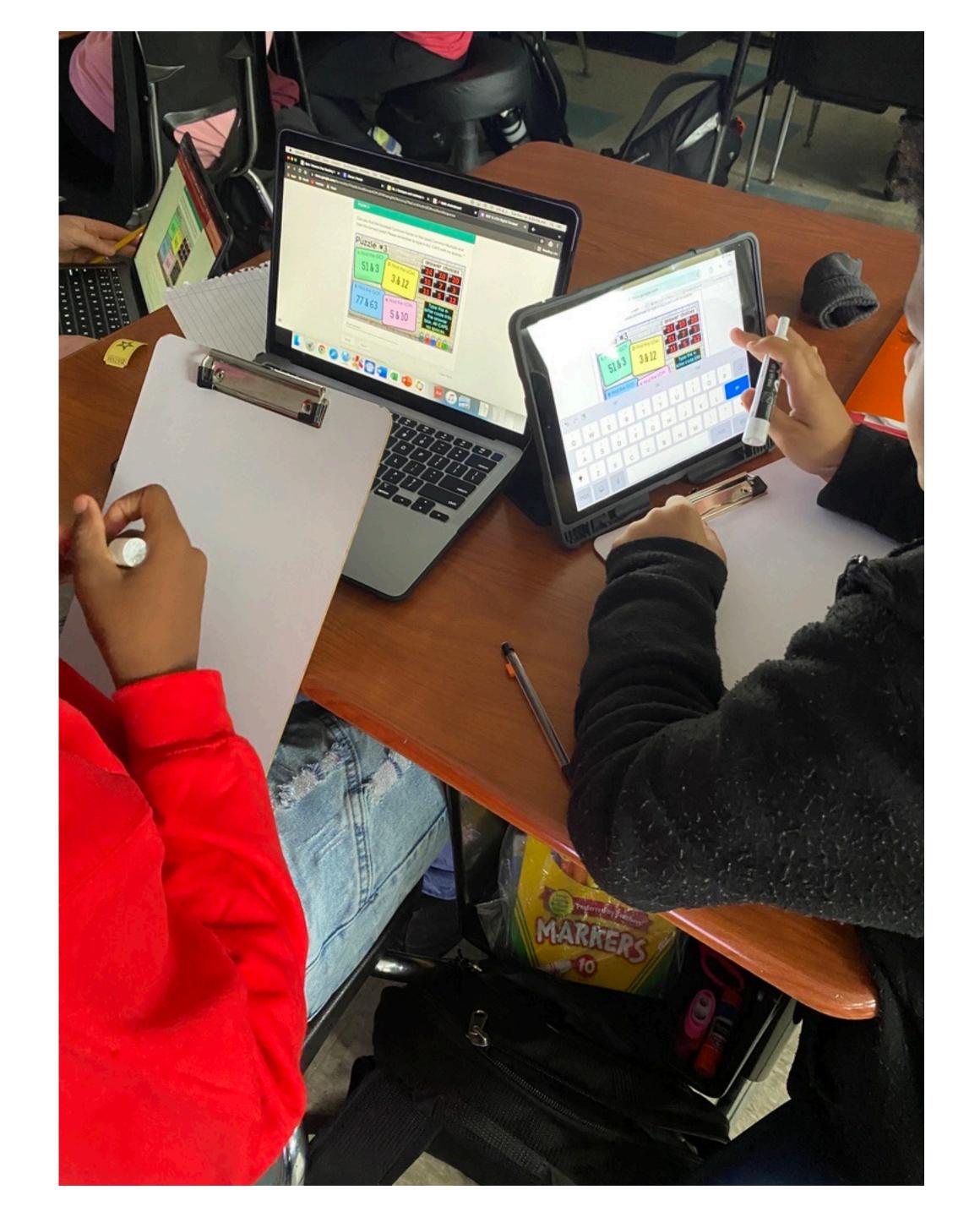


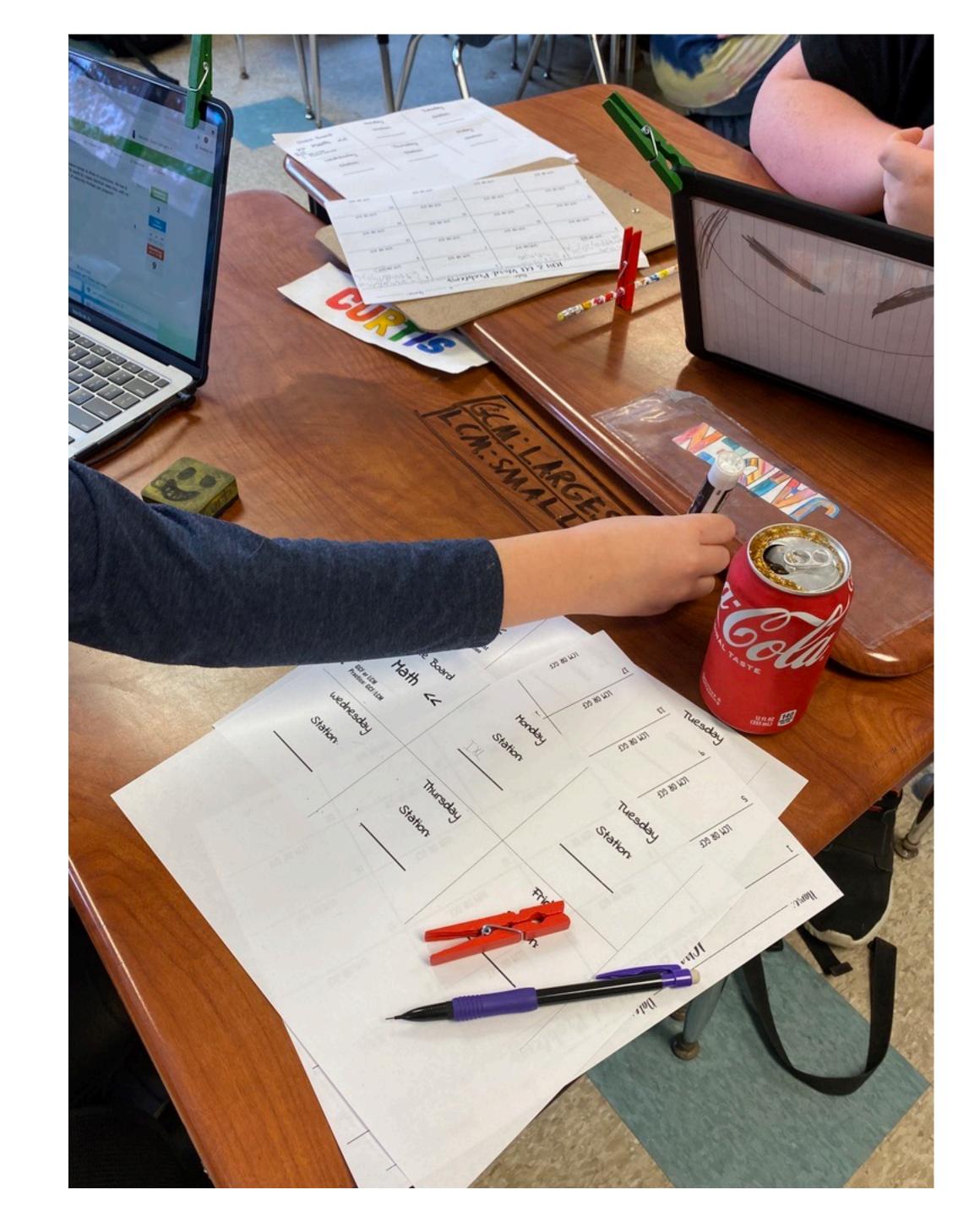
WORKSPACE (Click to add text)

What does student voice mean to you? Why is it important? How are you implementing it in school or district?



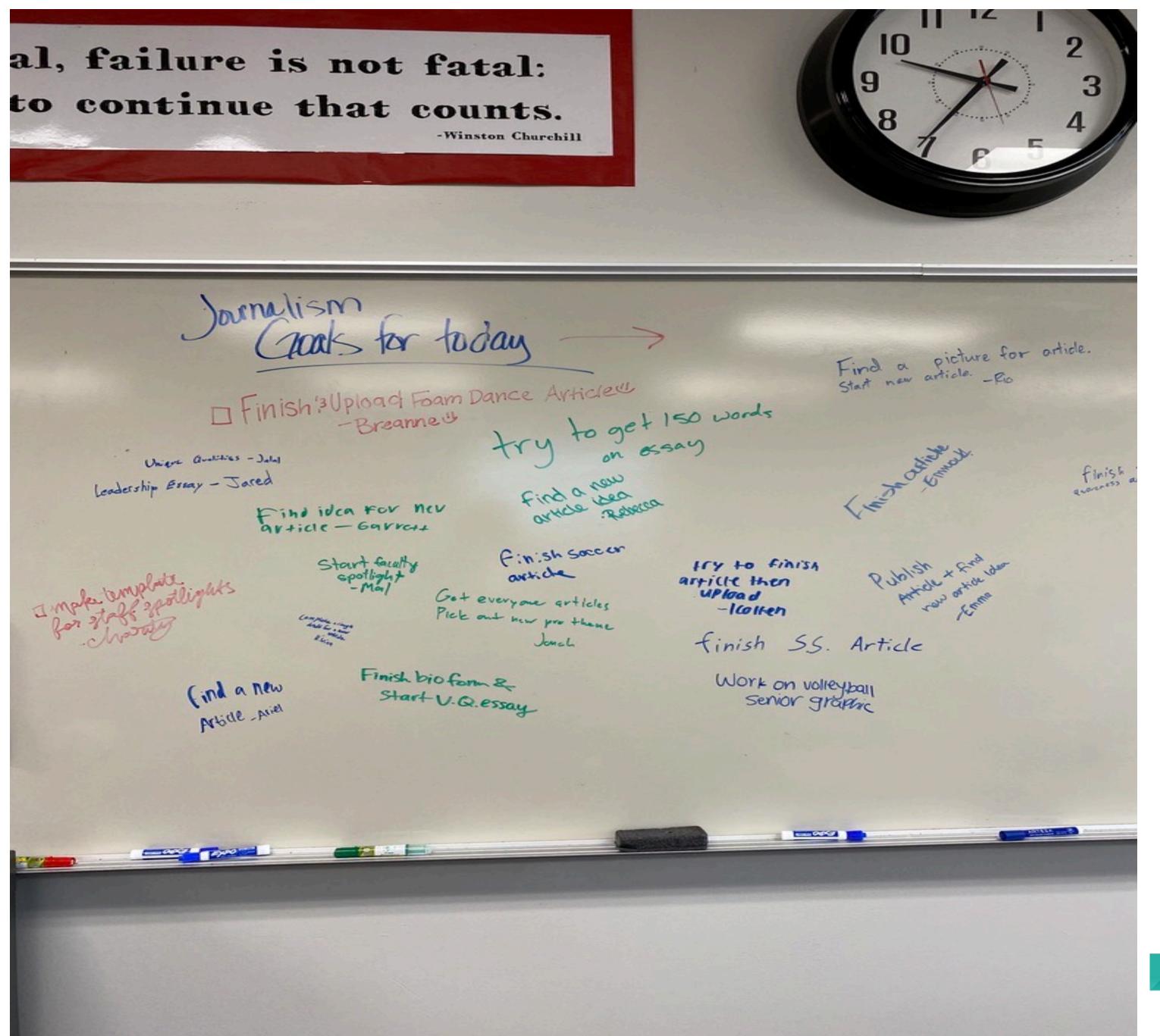














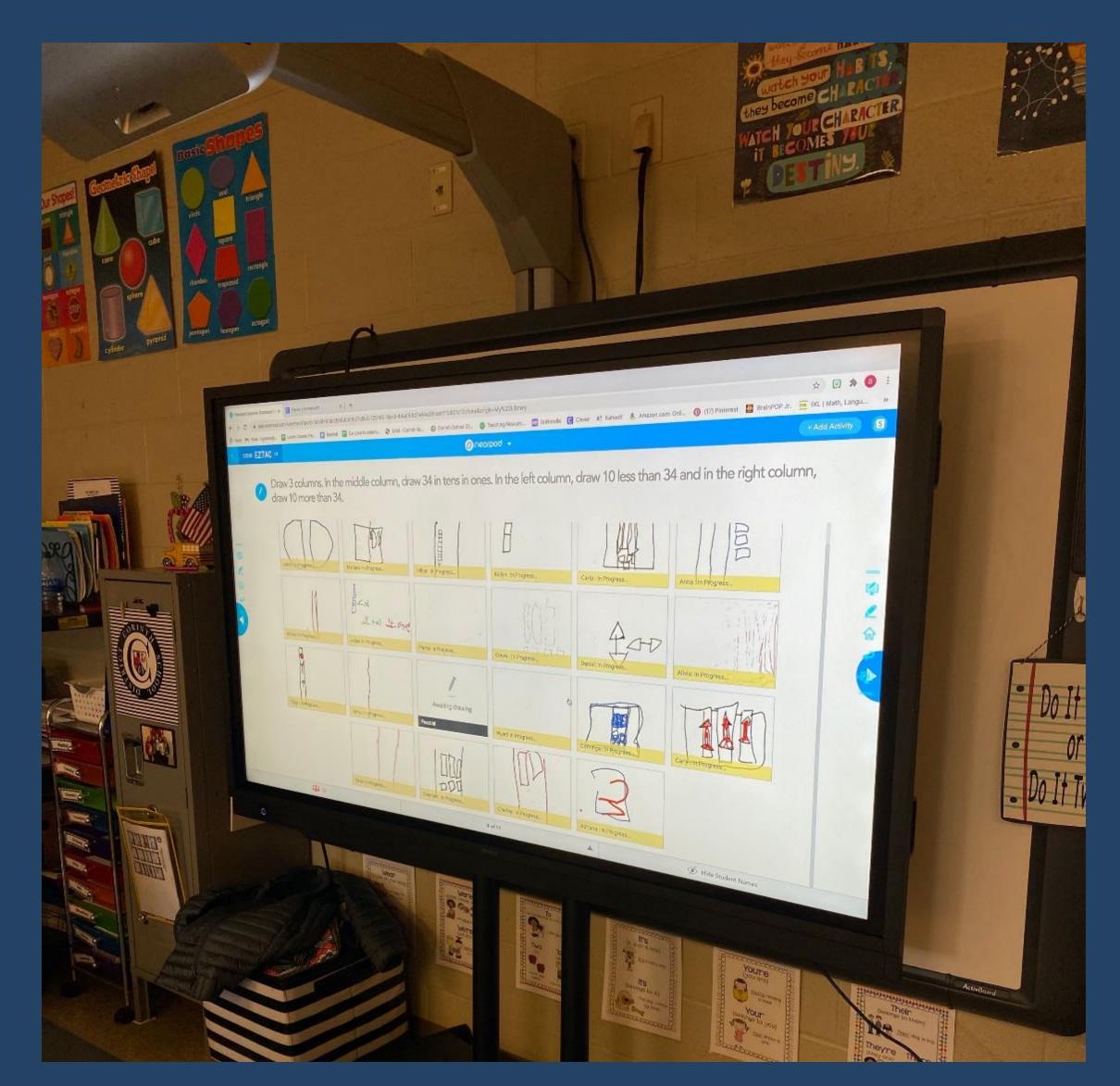
### Mentimeter

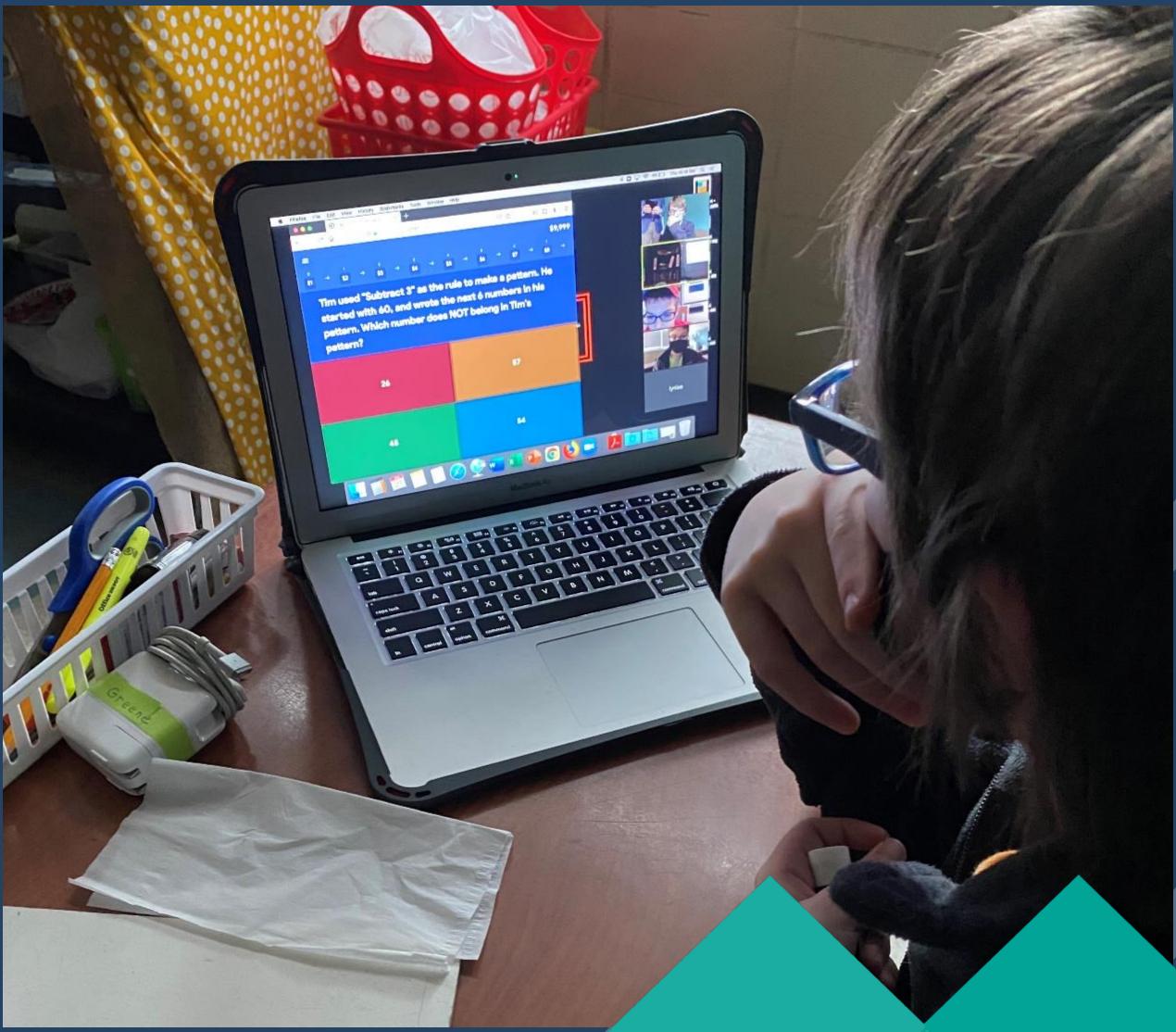


Make an inference in one word what you think this next Module will be about?

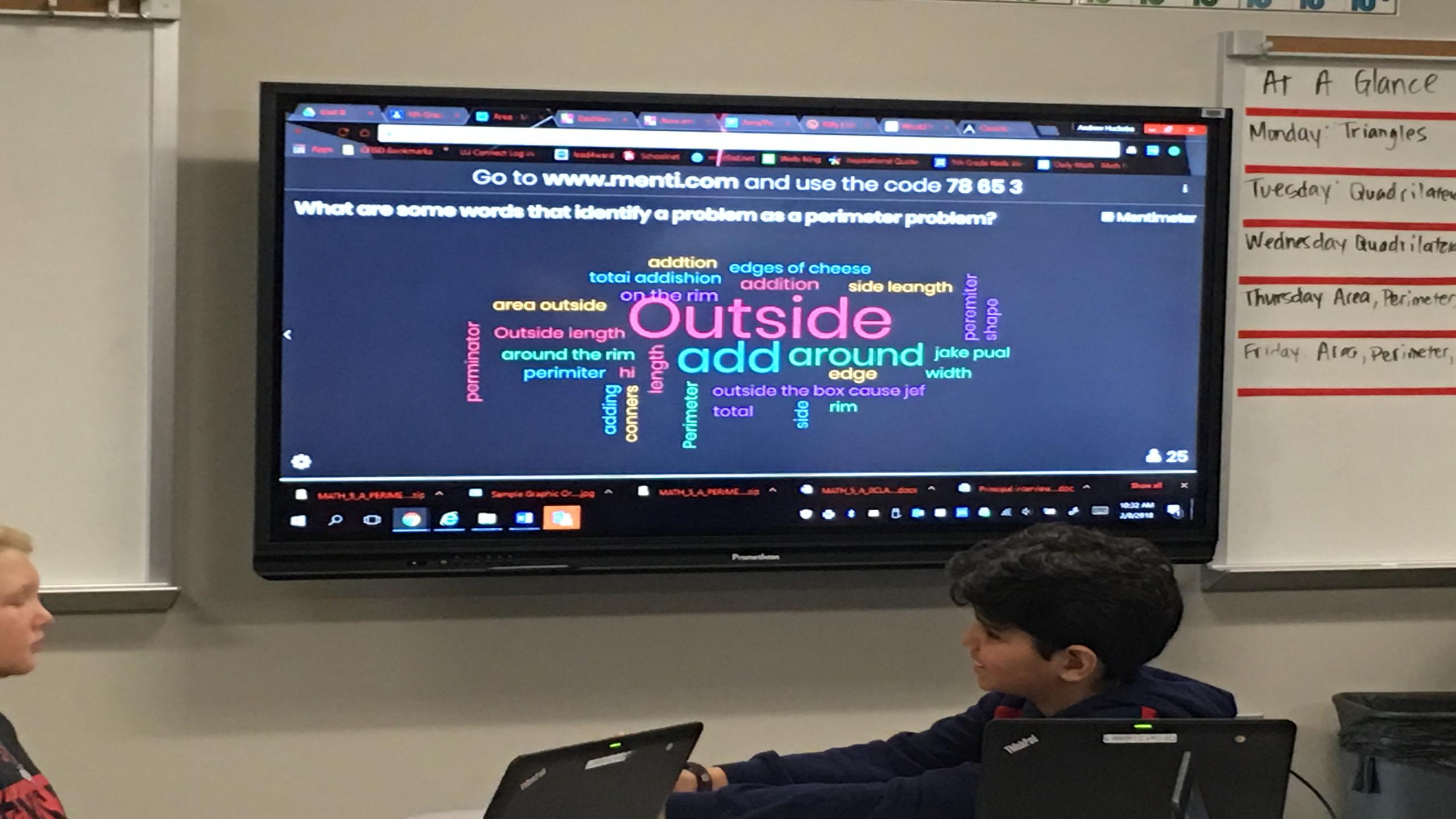
Enter a word	25
Enter another word	25

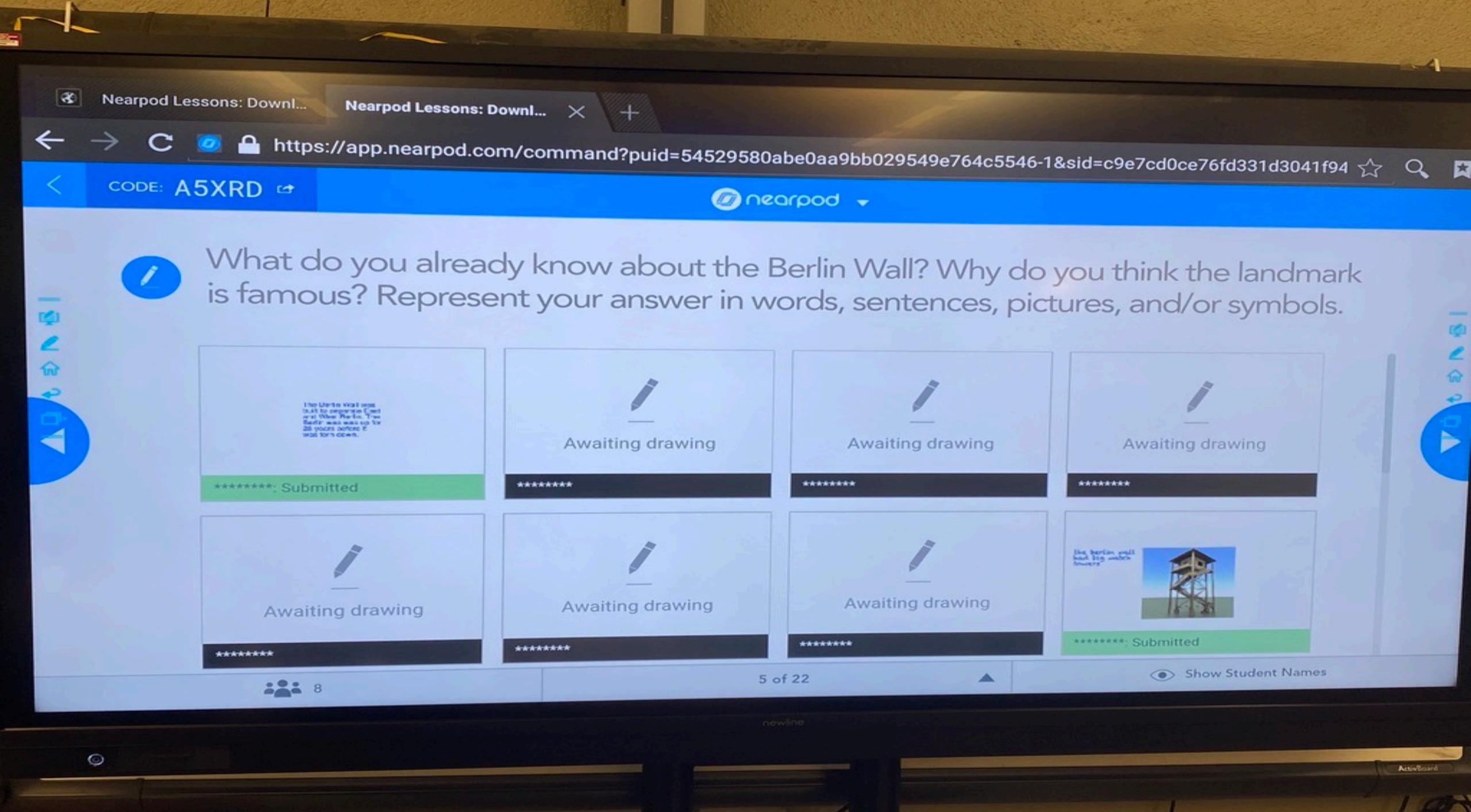
You can submit multiple answers

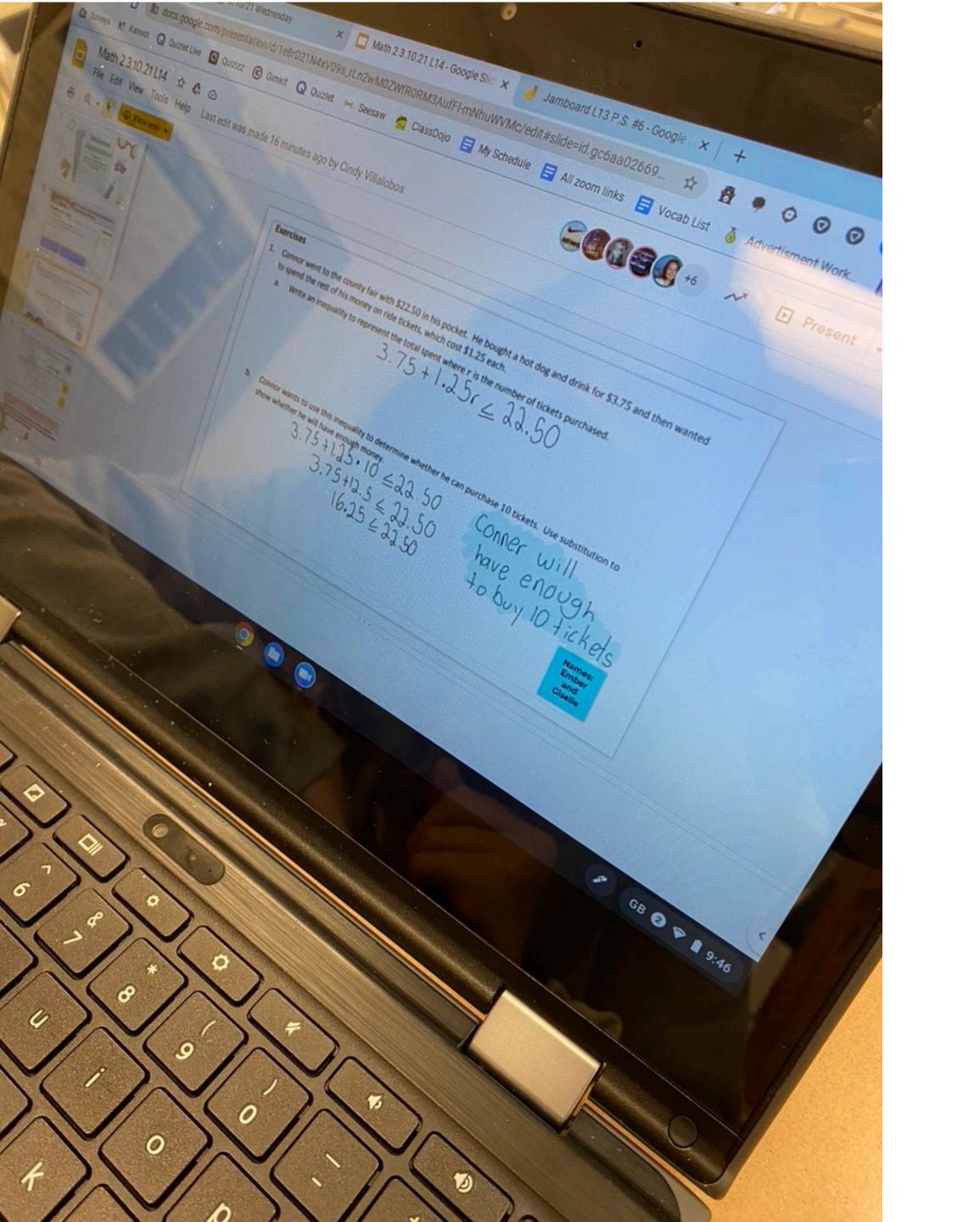


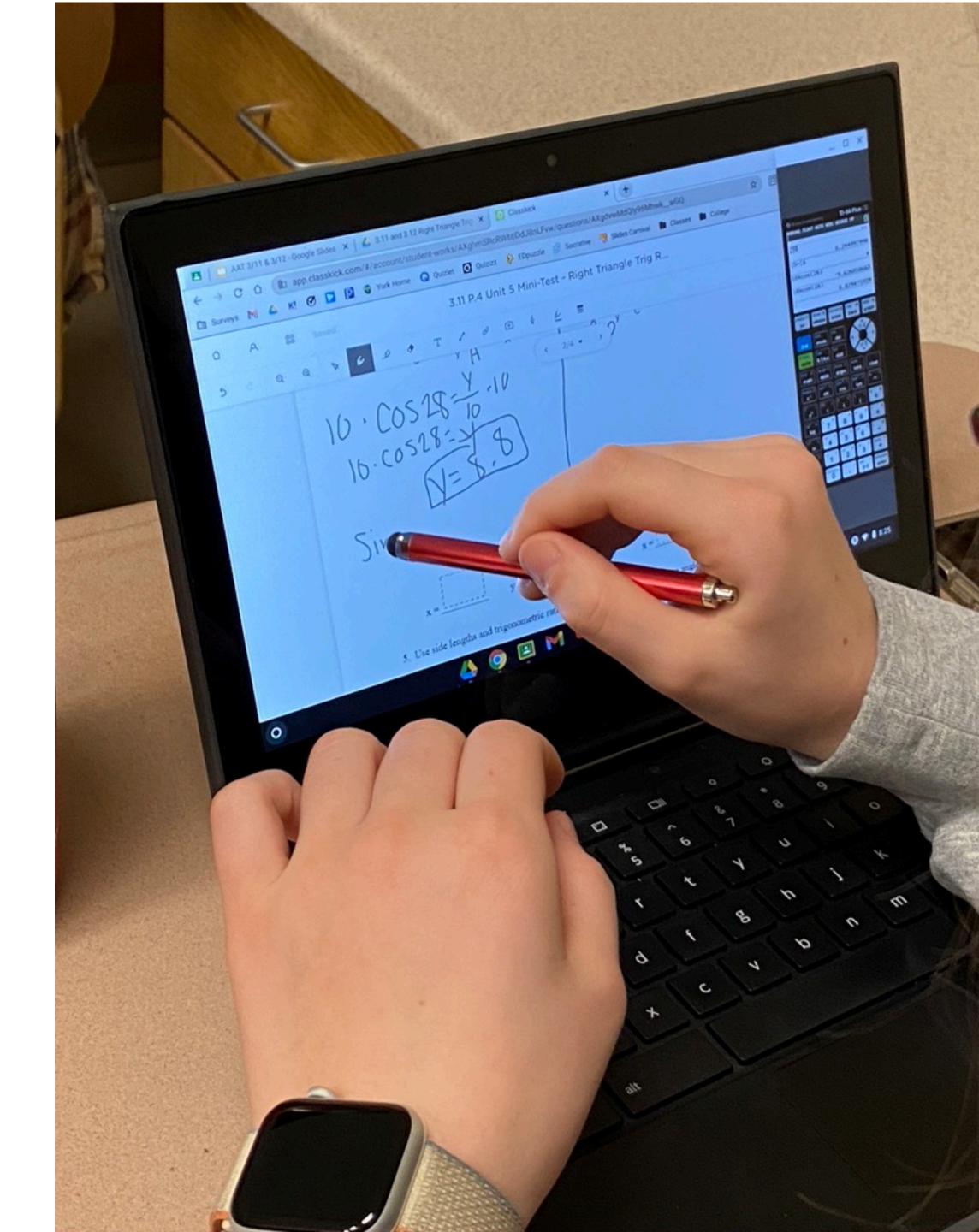


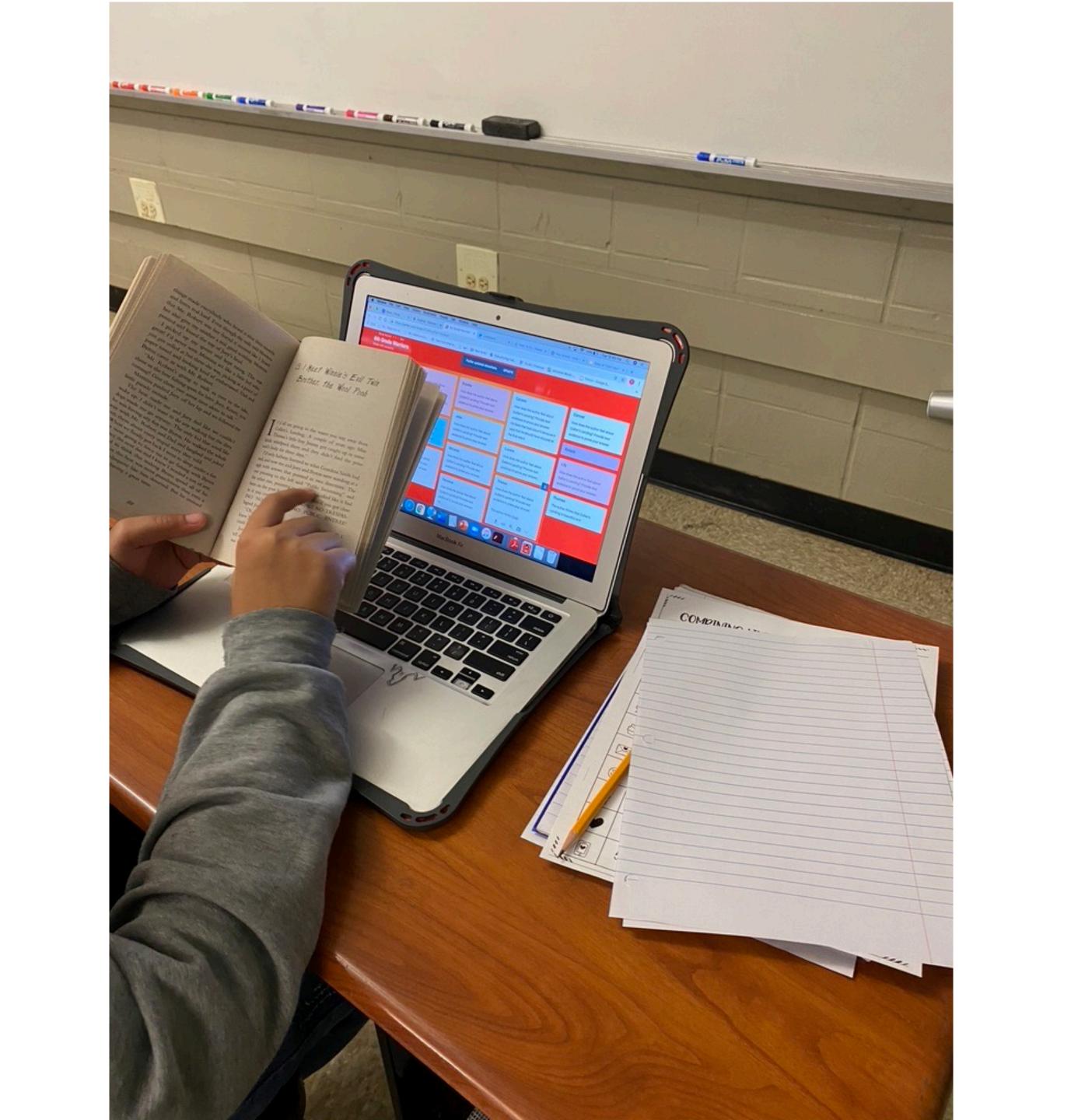


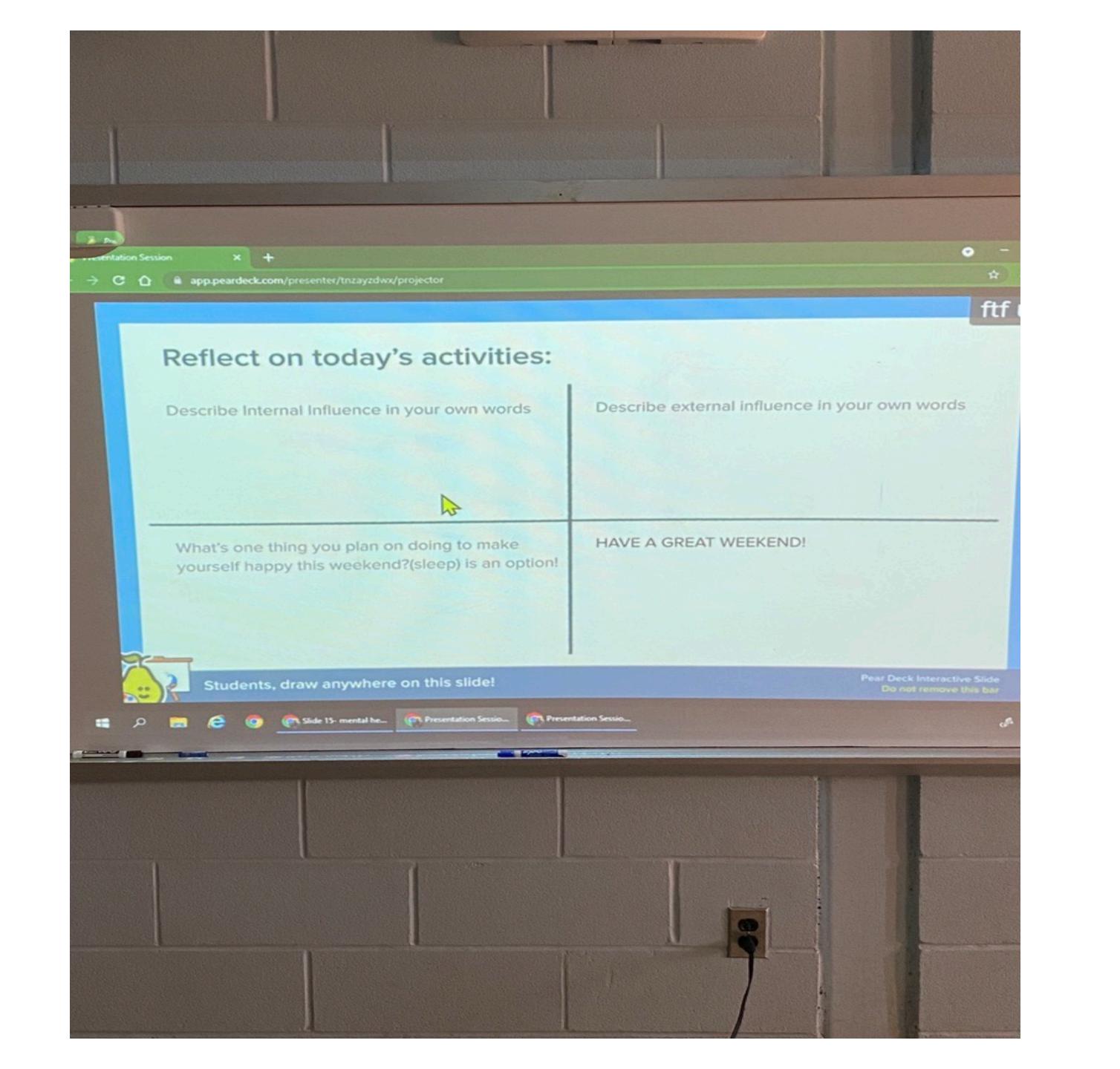


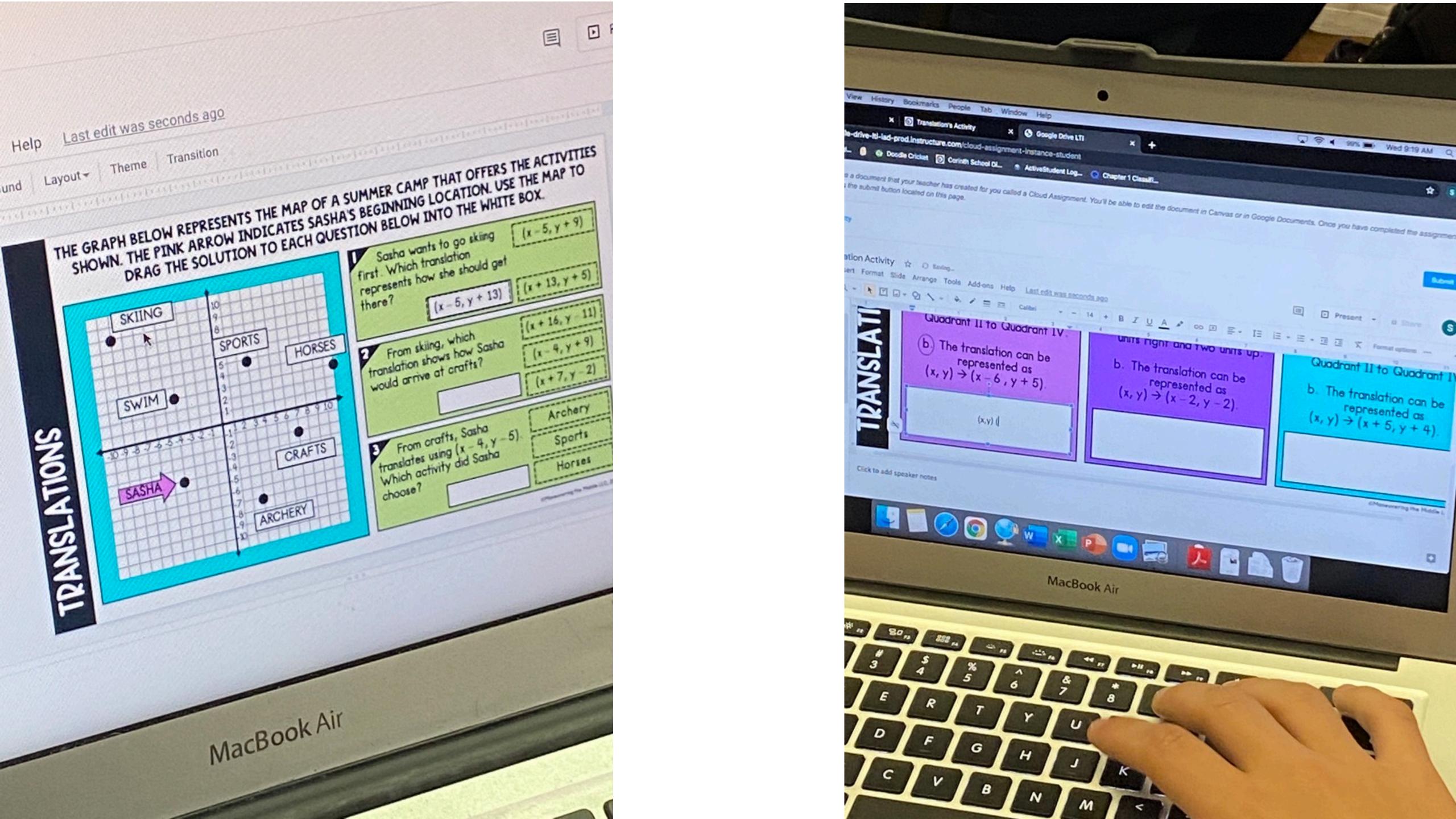


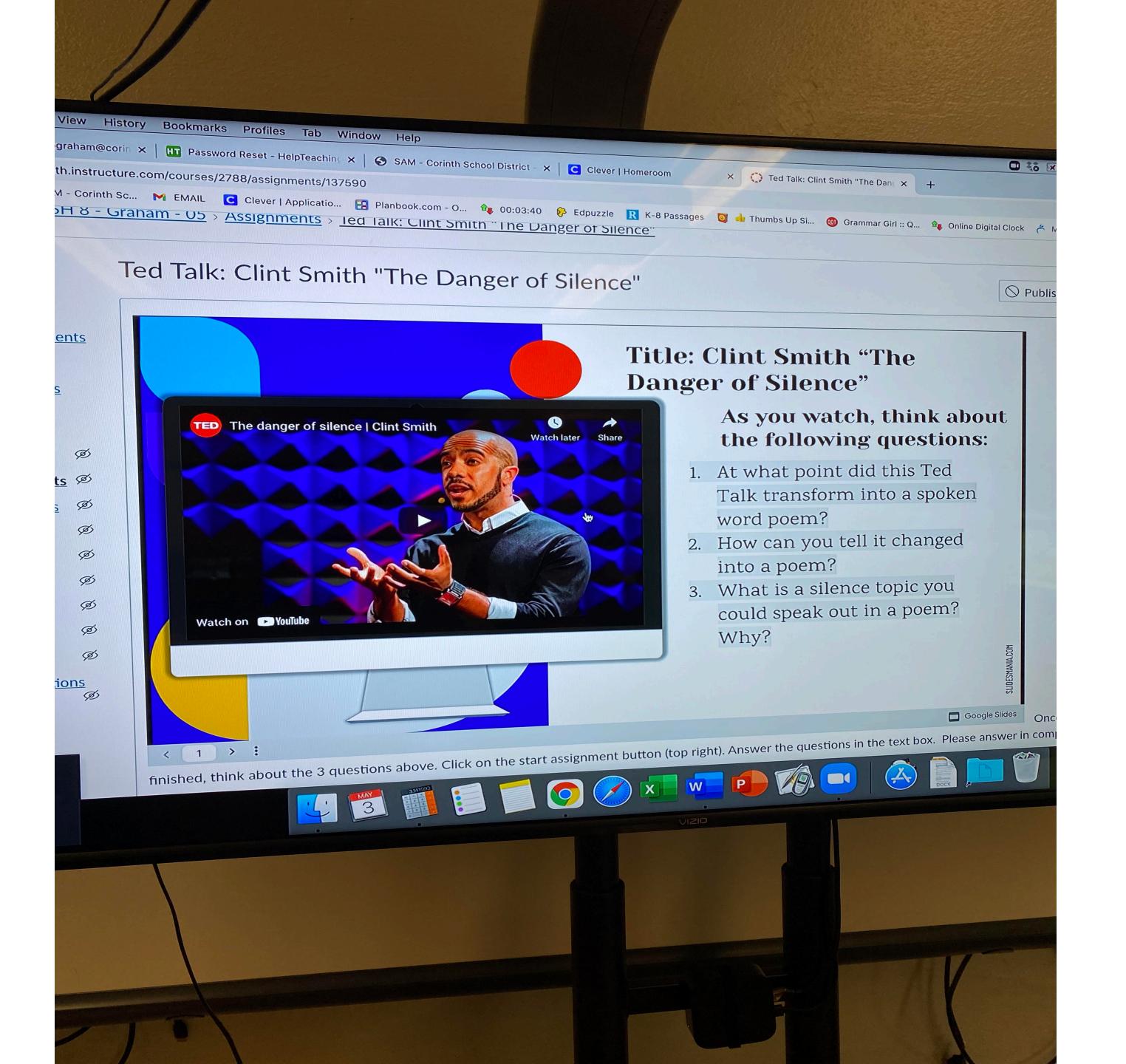






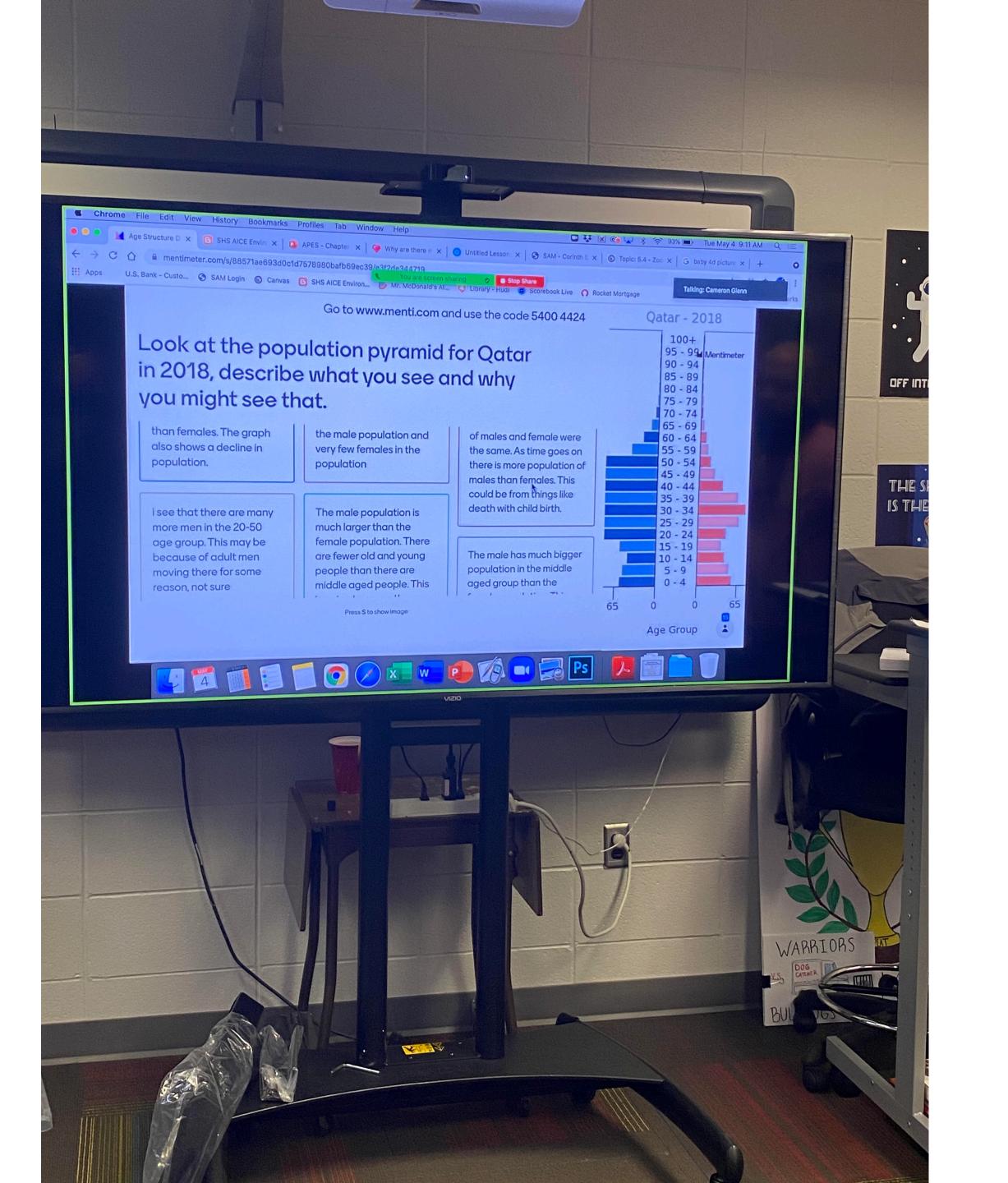


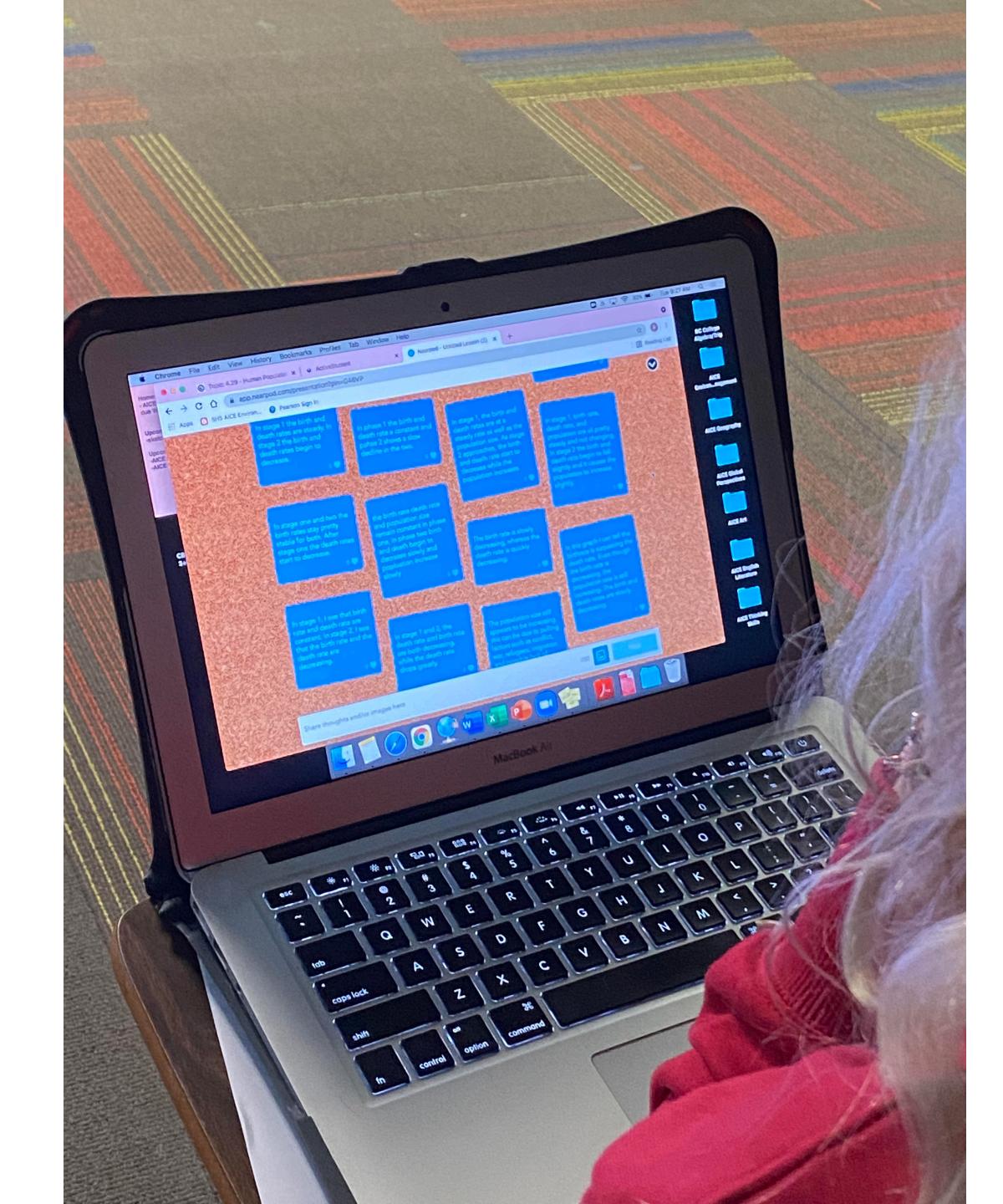


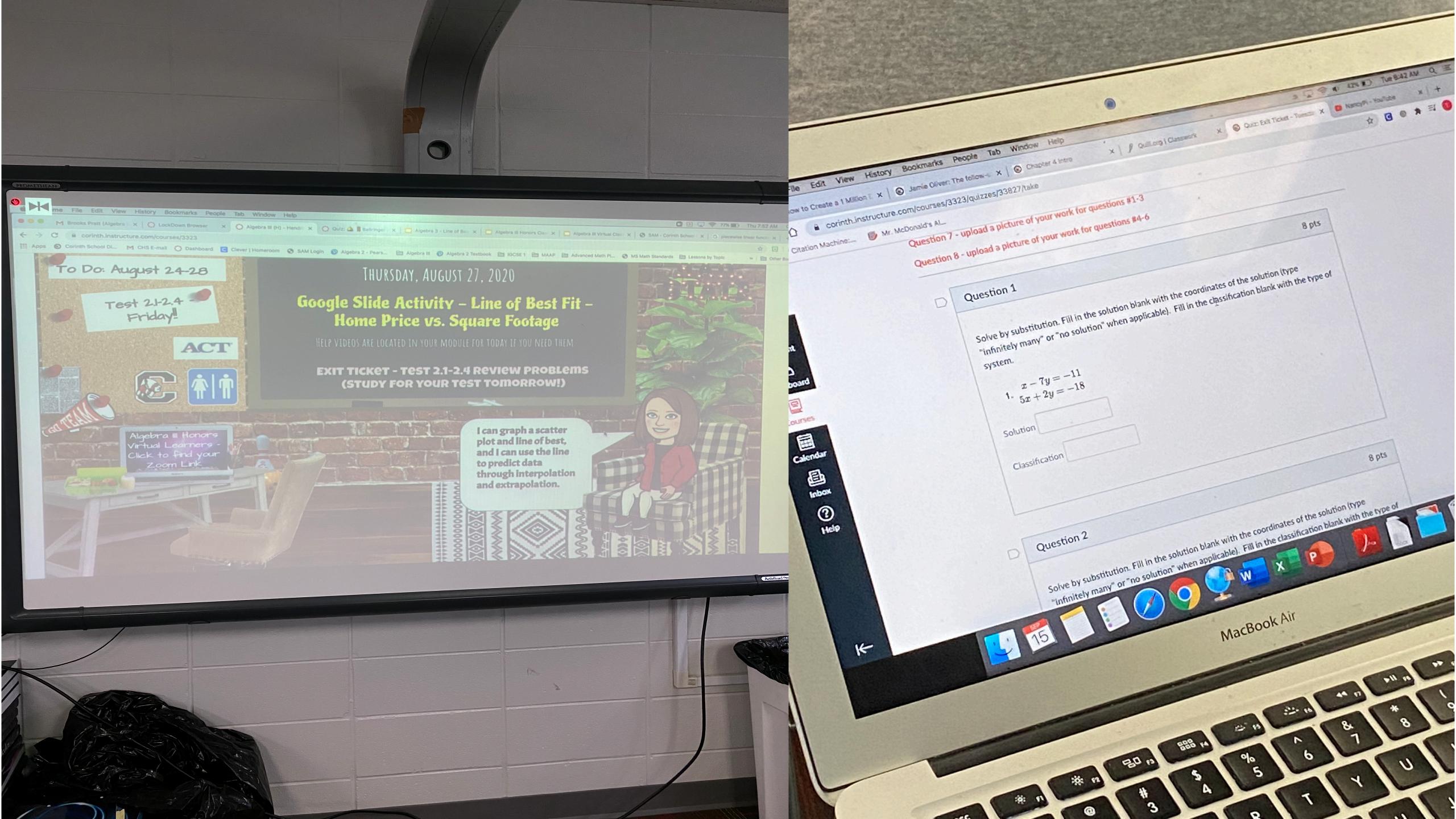


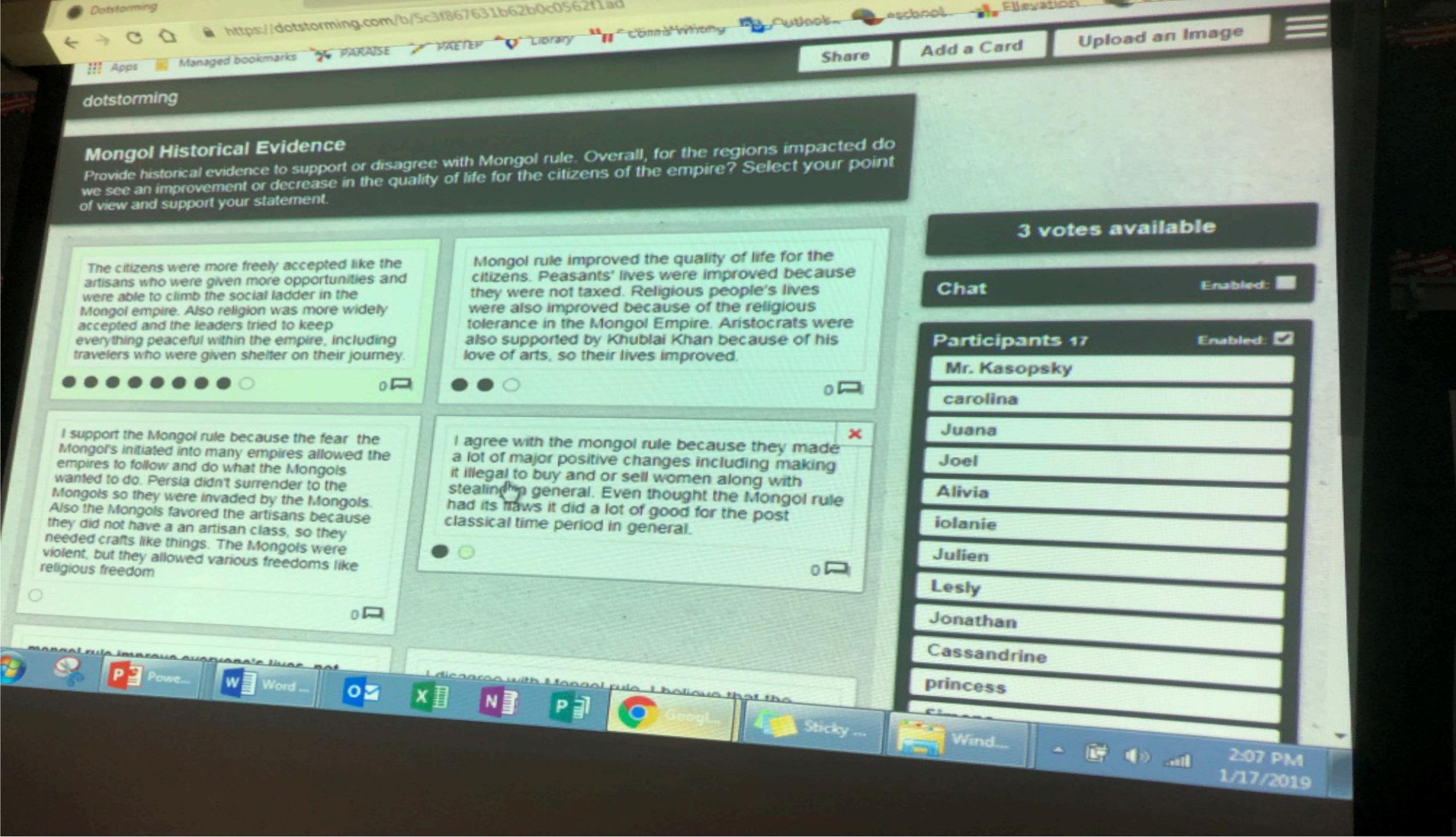


From Houghton Mifflin Harcourt











Writing



Video

Showing Learning Through Voice and Choice



Audio



Images



Drawing

Eric Sheninger (@E\_Sheninger)
Image created by @RigorRelevance

# Technology Use By Quadrant

#### **CREATING**

CAN THE STUDENT CREATE NEW PRODUCTS OR POINTS OF VIEW?

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### **EVALUATING**

CAN THE STUDENT JUSTIFY A STAND OR DECISION?

**ANALYZING** 

CAN THE STUDENT DISTINGUISH BETWEEN THE DIFFERENT PARTS?

## **APPLYING**

CAN THE STUDENT USE THE **INFORMATION IN A NEW WAY?** 

#### **UNDERSTANDING**

**CAN THE STUDENT EXPLAIN IDEAS OR CONCEPTS?** 

#### **REMEMBERING**

CAN THE STUDENT RECALL OR REMEMBER THE INFORMATION?

#### **VERBS**

- Analyze
- Classify
- Diagram
- Evaluate Examine
- Explain
- Infer
- Judge Research
- Summarize

#### **EXAMPLES**

- Hyperlinking
- Media Clipping/ Cropping
- Monitoring
- Photos/Video
- Programming
- Reverse Engineering
- Software Cracking
- Testing
- Validating Resources
- Video Editing

#### **VERBS**

- Argue
- Conclude
- Create
- Explore Invent
- Modify
- Plan
- Predict • Rate

#### **EXAMPLES**

- Animating
- Audio Casting
- Blog Commenting
- Broadcasting
- Collaborating
- Composing-Garage Band
- Digital Storytelling
- Directing
- Mashing-Mixing/Remixing
- Modifying/Game Modding
- Networking
- Photo/Video Bogging
- Podcasting
- Reviewing

#### **VERBS**

- Define
- Identify
- Label
- List
- Locate Memorize
- Name
- Recite
- Record Select

#### **EXAMPLES**

- Bullets & Lists
- Creating & naming Folders
- Editing
- Highlighting/Selecting
- Internet Searching
- Loading
- Typing

- Using a Mouse

- Word Doc

#### **VERBS**

- Apply
- Construct
- Demonstrate Dramatize
- Illustrate
- Interpret
- Interview Sequence
- Solve

#### **EXAMPLES**

- Advanced Searching
- Annotating
- Blogs
- Google Docs
- Hacking
- Operating/ Running a Program
- Posting-Social Media
- Replying-Commenting
- Sharing
- Social Bookmarking
- Subscribing to RSS feed
- Tagging
- Texting
- Uploading Web Authoring

# APPLICATION MODEL

**KNOWLEDGE IN** 

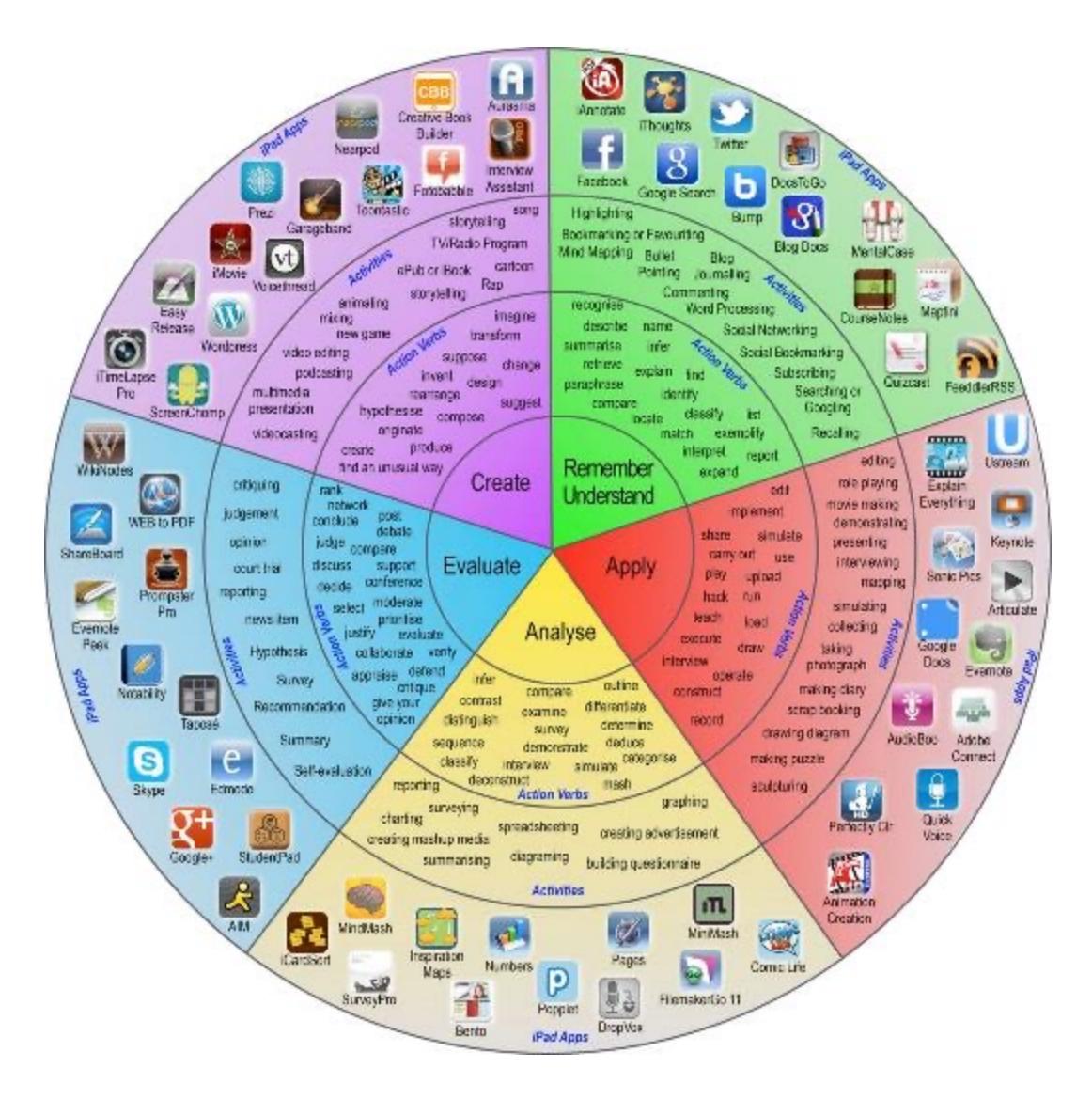
**APPLICATION** 

**APPLICATION TO REAL-WORLD** PREDICTABLE SITUATIONS **APPLICATION TO REAL-WORLD SITUATIONS**  International Center for Leadership in Education.

From Houghton Mifflin Harcourt

# "Pedagogy is the driver, technology is the accelerator"

- Michael Fullan



# Tools

- Mentimeter (review of prior learning, checks for understanding, closure)
- Pear Deck (formative and targeted assessment)\*
- Nearpod (formative and targeted assessment)\*
- Padlet (cooperative learning, closure, checks for understanding)
- Linoit (cooperative learning, closure, checks for understanding, annotation)
- Flipgrid (video creation for closure, checks for understanding, blended learning)
- Newsela (assign current event articles by Lexile and quizzes)
- Freckle (differentiation, stations)\*
- Edpuzzle (upload videos and insert questions)\*
- GoSoapBox (confusion indicator, quizzes, discussion forum, polls)
- Formative (formative assessment, differentiation)\*
- **Gimkit** (game-based formative assessment, closure)
- QuizWhizzer (formative assessment, closure)
- Blooket (game-based formative assessment)
- Seesaw (demonstrate and share learning)
- AnswerGarden (checks for understanding, closure)

\* Denotes importing and syncing with Google Classroom, Canvas, Schoology

# Bit.ly/edtechdisrupt



Developing Disruptive Thinkers

## RELEVANCE

Meaningful Work
Authentic Resources
Learning Connections

ENGAGE IN PROBLEM SOLVING

COLLABORATE WITH OTHERS

OPEN-MINDED

ANALYZE, REASON, AND EVALUATE THINK CRITICALLY AND CREATIVELY

MAKE REAL-WORLD
APPLICATIONS

REFLECT ON LEARNING

COMMUNICATE CLEARLY AND ACCURATELY

## **RIGOR**

Thoughtful Work
High-level Questioning
Academic Discussion

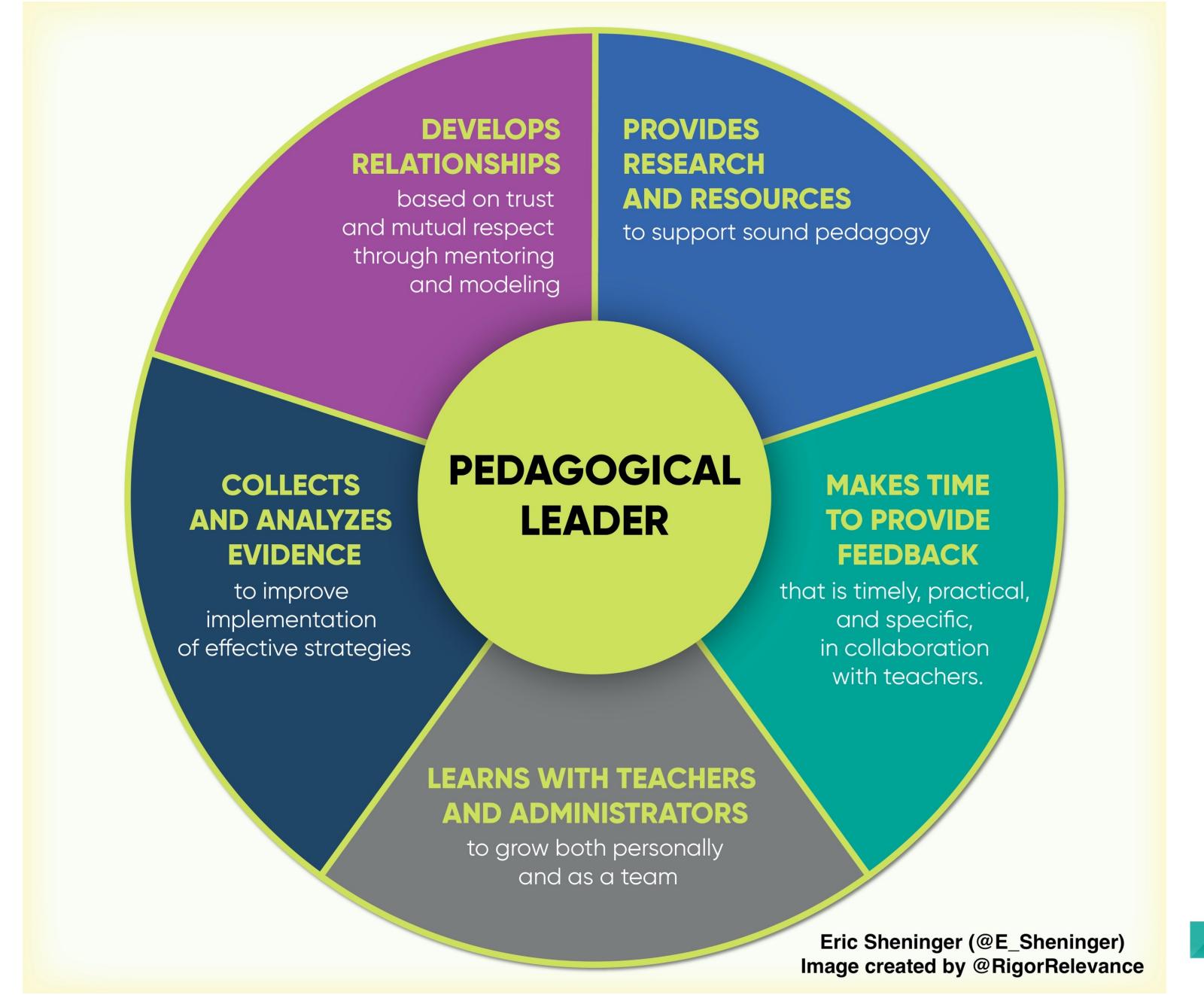


## **EMPOWERMENT**

Active Participation
Learning Environment
Formative Processes
and Tools

Image created by @RigorRelevance

Eric Sheninger (@E\_Sheninger)











Personalizationrely on sound pedagogy to meet needs

# Key considerations

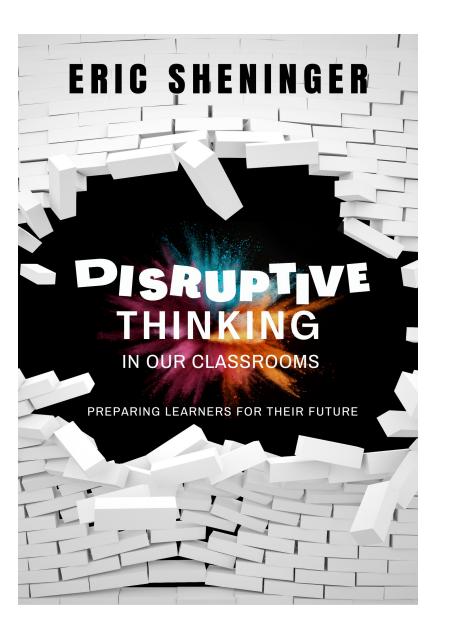
- 1. Conduct a culture audit to see where growth is needed
- 2. Leverage lessons learned from the pandemic to implement and sustain change
- 3. Look for ways to empower learners through voice
- 4. Ensure sound pedagogy, with and without technology, is in place





@e\_sheninger

ericsheninger.com esheninger@leadered.com





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