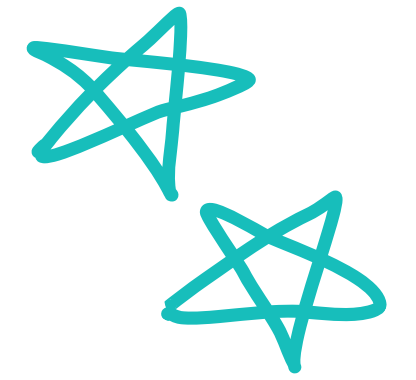




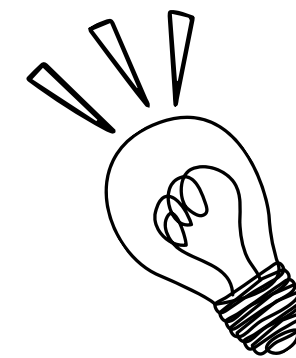
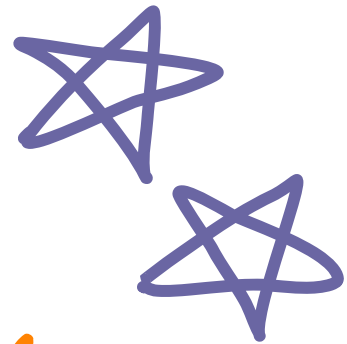
**CURIOSITY**  **CREATE**

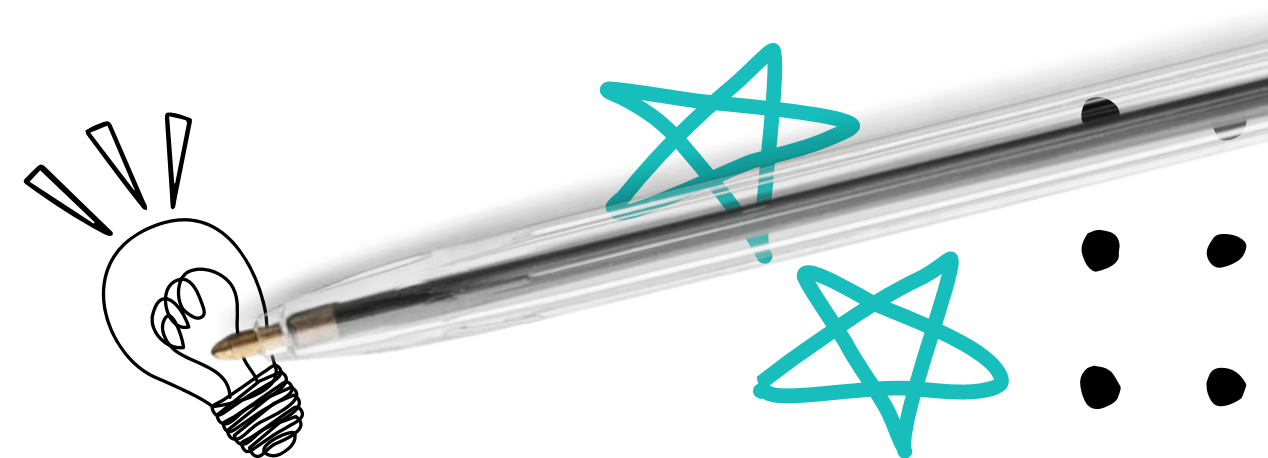


**CREATING FUTURE THINKERS:**

**CREATIVE AND CRITICAL THINKING IN THE**

**CLASSROOM**





**PLEASE SIT IN GROUPS ACCORDING  
TO THE GRADE LEVEL YOU TEACH**

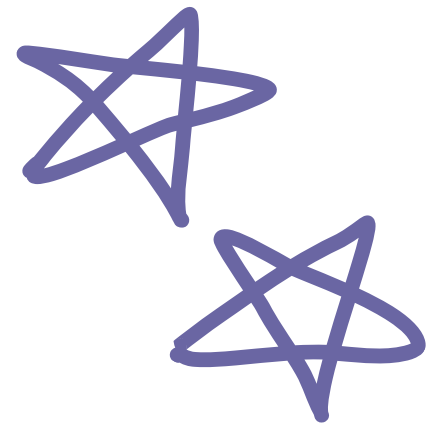




# KATIE TROWBRIDGE

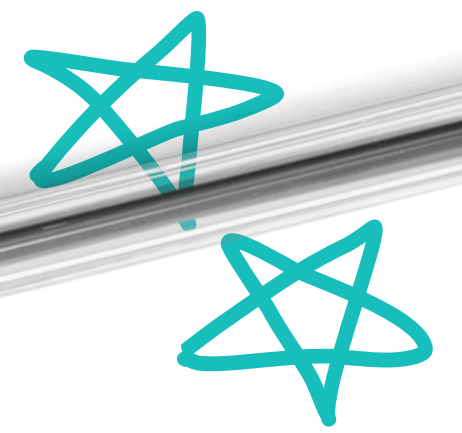
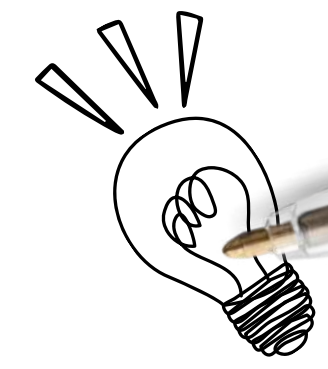


**CEO & President**

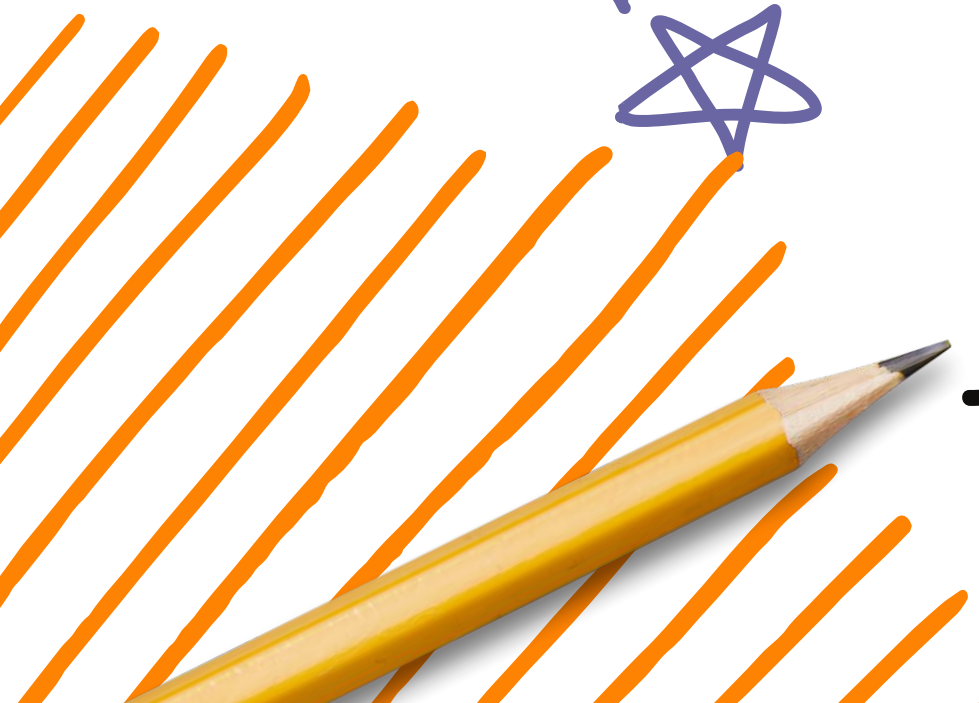


- High school English teacher for 23 years
- Born and raised in Chicago
- M.A.T and M.Ed, pursuing EDD
- Curriculum Development Team and Leader
- Coach
- SEL District Committee
- Speaker
- Mom of 6
- Grandma of 4





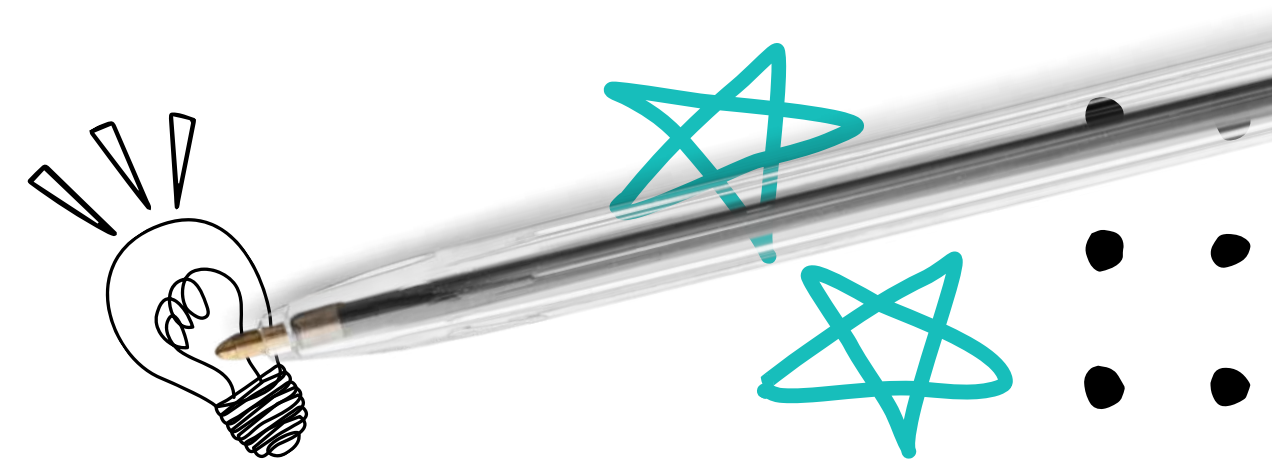
# HOW DO YOU DEFINE CREATIVITY?



# THINK ABOUT



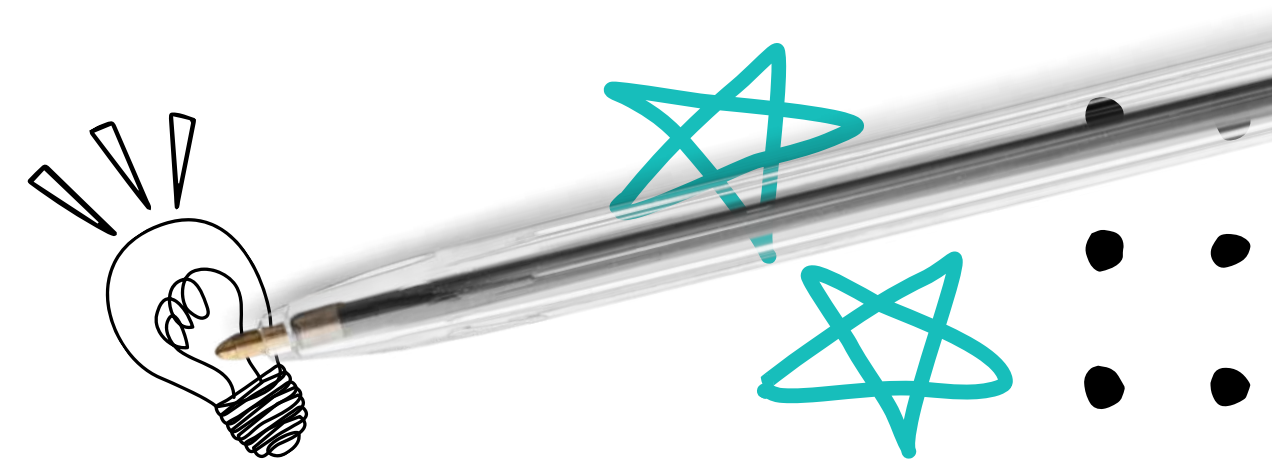
- A time when you had a creative learning experience?
  - When was it?
  - How did it feel?
  - What did you learn?
- Share with the person next to you.
- What characteristics did your experiences have in common?
- How did they differ?



**WHAT ARE THE CHARACTERISTICS OF CREATIVE  
TEACHING?**

**WHAT DOES THAT LOOK LIKE IN YOUR GRADE LEVEL?**





**WHAT ARE THE CHARACTERISTICS OF CREATIVE  
LEARNING?**

**WHAT DOES THAT LOOK LIKE IN YOUR GRADE LEVEL**



	<b>CREATIVE TEACHING</b>	<b>CREATIVE LEARNING</b>
<b>CONTENT CREATING</b>	Teacher focused - content being delivered uniquely and engagingly by the teacher	Student focused - content being delivered unique and meaningfully by the student
<b>RISK TAKING</b>	Teacher creates a classroom environment where reaching outside one's comfort zone is appreciated and encouraged.	Students actively embrace and celebrate ambiguity, uncertainty, and failure while supporting each other's growth.
<b>QUESTIONING</b>	Teacher generates open-ended and complex questions for students to answer	Students generate the open-ended and complex questions and answers
<b>PROBLEM SOLVING</b>	Teacher creates inquiry-based projects for students to complete	Students use choice in creating multiple solutions to various brainstormed problems
<b>COLLABORATING</b>	Teacher-to-student Teacher-to-teacher Teacher-to-knowledge	Student-to-knowledge Student-to-student Teacher-to-student
<b>OWNERSHIP OF CREATIVITY</b>	Teacher	Student



**CREATIVE LEARNING**

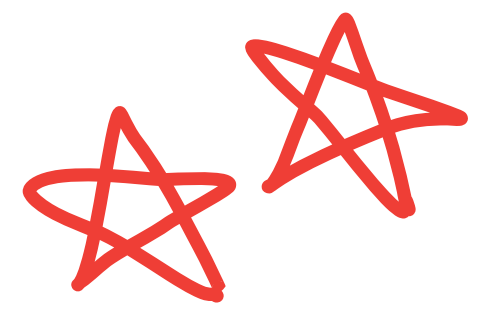


**THE SWEET SPOT**

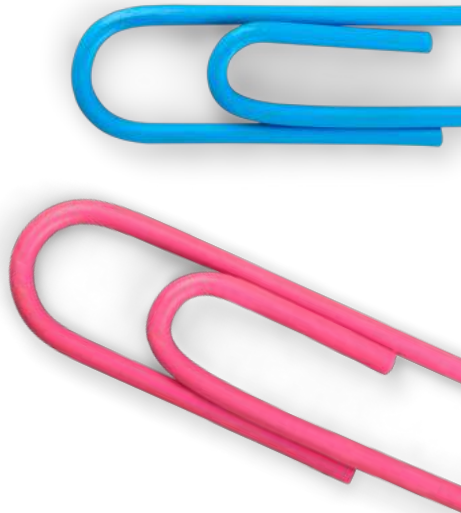


**CREATIVE TEACHING**





# WHAT IS CREATIVE THINKING?



**“A process of generating thoughts (ideas, interpretation, or insights) that are evaluated by oneself or others to be original and meaningful in the context of a particular task, situation, or domain.” (Beghetto 2020)**





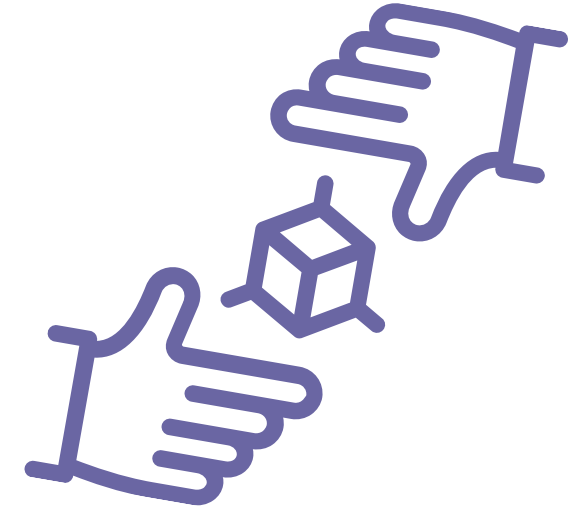

# WHY IS CREATIVE AND CRITICAL THINKING IMPORTANT IN TODAY'S WORLD?

- The world is changing, and future employers are requiring these skills
- Research from [LinkedIn](#), [Adobe](#), and [World Forum](#) show these skills in the top 10 most needed skills for the future
- Our world is full of uncertainties, and these skills will assist in navigating the future
- Creative thinking leads to creative problem solving
- Creativity encourages wellness and empathy





# WHY ARE CREATIVE AND CRITICAL THINKING IMPORTANT IN EDUCATION?



- Challenges students to learn from different perspectives
- Creates rigorous curriculum
- Encourages collaboration and communication
- Allows teachers to act as a facilitator
- Gives students more autonomy to learn what they are curious about
- Encourages students to take risks and embrace failure



# WHAT'S STOPPING US?



**When I talk to teachers across the country about their concerns with infusing curriculum with creative thinking – I receive various responses:**

- “I have too much content to teach - I don’t have time for any creative lessons.”
- “Incorporating creativity in my classroom seems less structured – thus seems more chaotic. It throws my classroom management off.”
- “Assessing for creativity is impossible. I need to stick to the standards being tested.”
- “I’m not a creative person, so how can I teach creativity?”



# PRODUCTIVE STRUGGLE

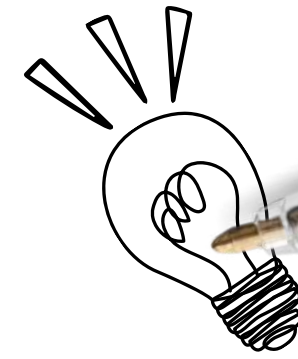


**“Effortful practice that goes beyond passive reading listening or watching - that builds useful, lasting understanding and skill.” (Bullmaster-Day (2014))**

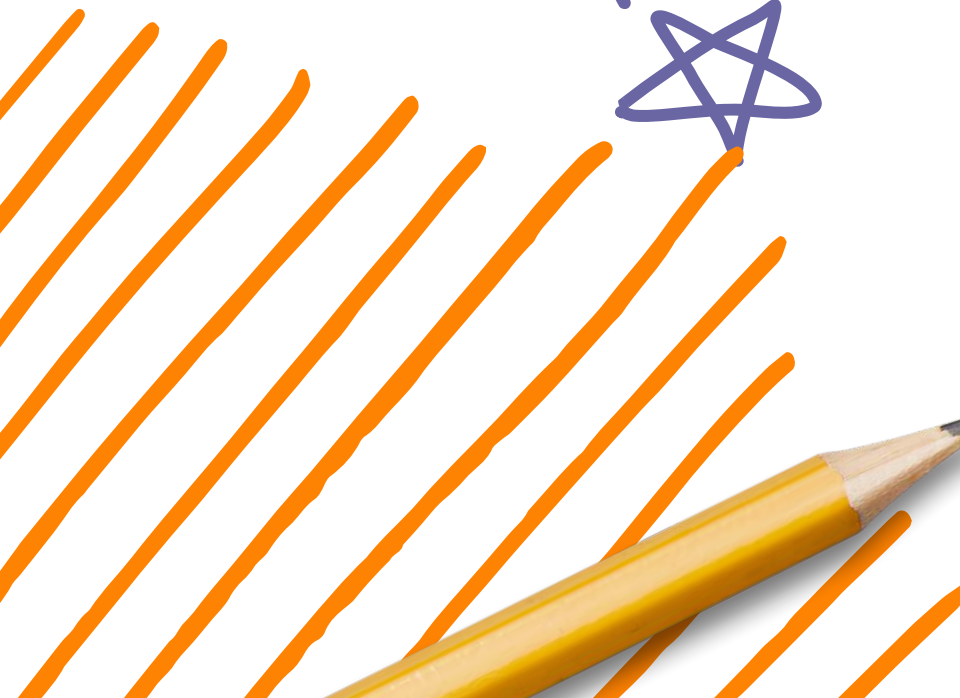
**Put creative learning ownership on the student.**

**Educators are the guides - the facilitators.  
Students are the conductors of knowledge.**





**THIS PROCESS MAY TAKE TIME IN YOUR CLASSROOM  
- BUT YOU CAN USE WHAT YOU ARE CURRENTLY  
TEACHING AND INFUSE IT  
WITH CREATIVE LEARNING**



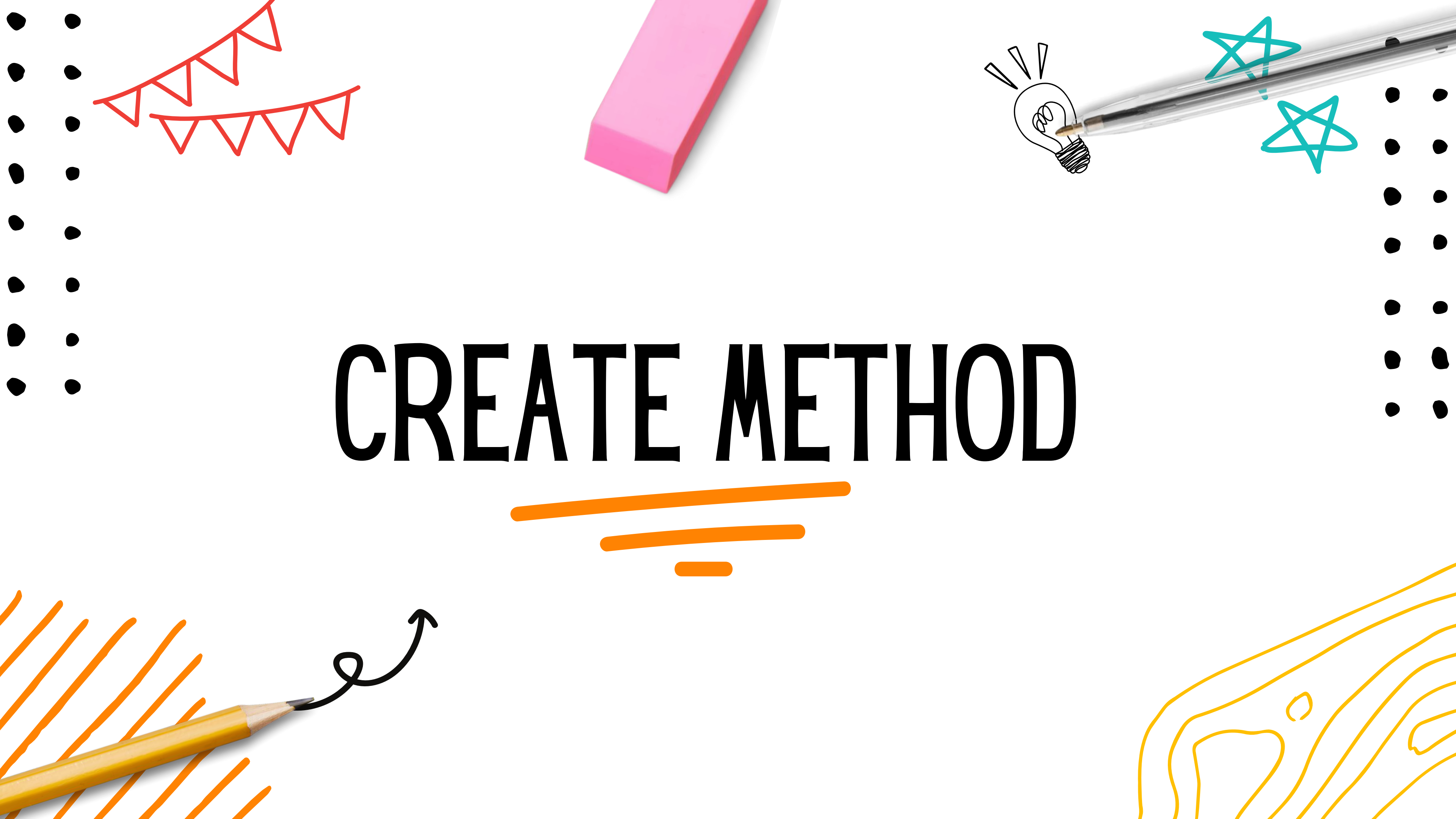
# AS A CREATIVE TEACHER, DO I...



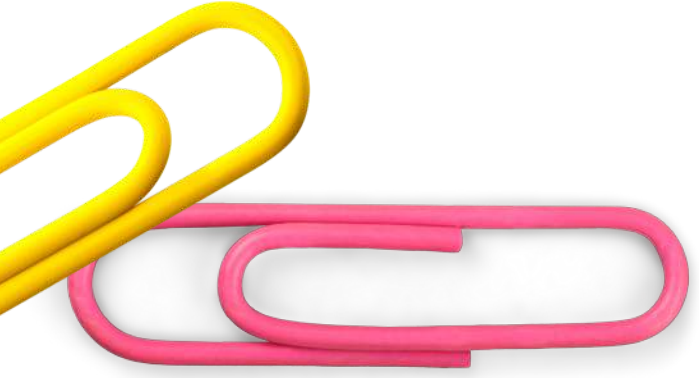
- **Welcome unconventional ideas in my classroom?**
- **Validate students' new, personally meaningful understanding of the curriculum?**
- **Allow time for students to share unique and personally meaningful understandings of their learning with each other?**
- **Offer complex problems/texts and allow time for my students to struggle to find meaning productively?**
- **Ask students "what do you think?"**







# CREATE METHOD



# CREATIVE THINKING IS A PROCESS!



## C- CONTENT CURATOR

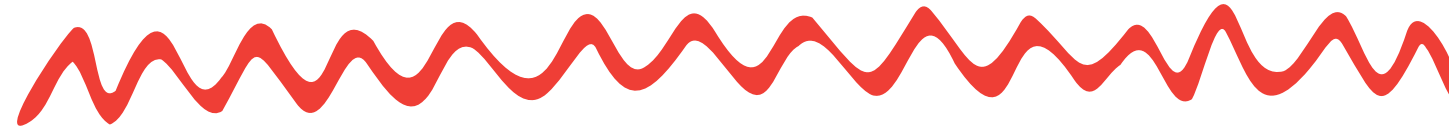
**Sharing knowledge in a way that is**

- **In-depth**
- **Relevant**
- **Challenging**
- **Inspiring**
- **Interesting**





# CREATIVE LEARNING IN ACTION

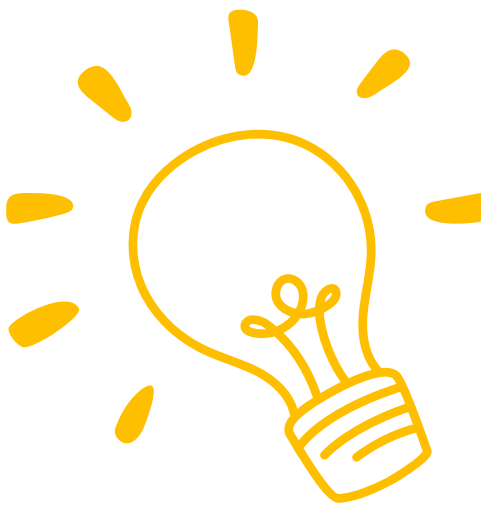


K-5

**Read alouds related to math concepts before lessons,  
followed by student discussion of text/questions.  
Allowing play/exploration of manipulatives before a lesson  
Storytelling/ dramatic recreation**

6-12

**Deconstruct - discover how a rollercoaster was built  
Give students a complex poem to analyze and let them  
struggle with it before you step in  
Ask "What if" questions - what if the outcome of World War  
II was different?**





# CREATIVE THINKING IS A PROCESS!



## R - RISK FACILITATOR

**Sharing knowledge in a way that is:**

- **Uncomfortable at times**
- **Transformational**
- **Apt to fail**

# CREATIVE LEARNING IN ACTION



K-5

Exploring scientific topics and hypothesizing about processes/outcomes  
Designing experiments and conducting them using the scientific method,  
then asking students to re-design with a completely new variable  
Engineering/makerspace (Rosie Rever Engineer)

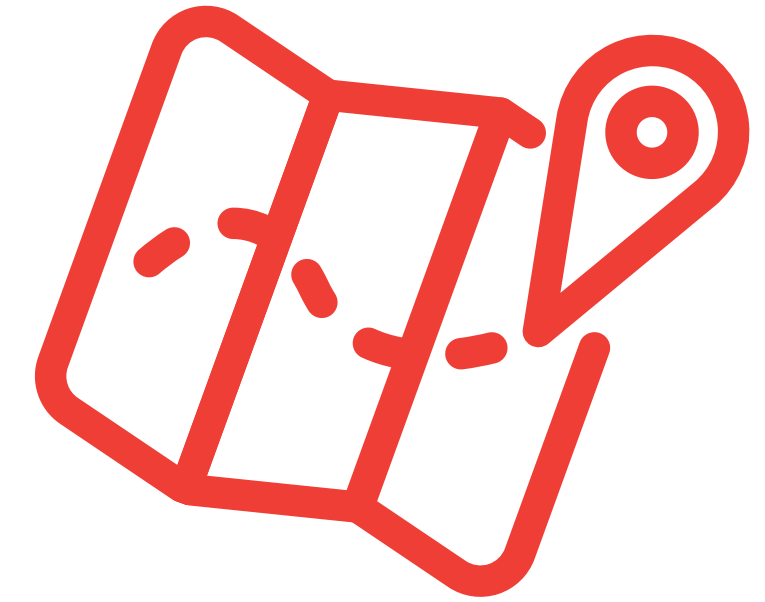
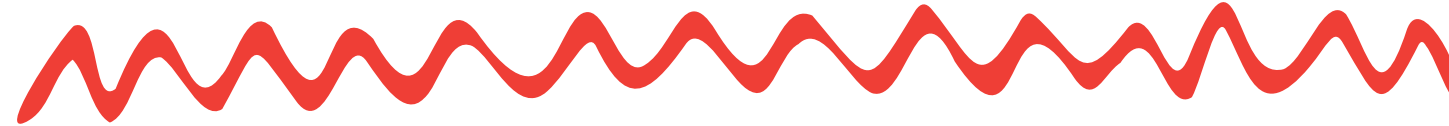
6-12

Give feedback along the way  
Visual representations of content (student choice)  
Teach how to create and ask questions without judgment  
Learn where your student is comfortable and push them to try  
something different  
Ask for different ways to solve the same problem





# CREATIVE THINKING IS A PROCESS!



## E- EXPERIENCE NAVIGATOR

**Sharing knowledge in a way that is:**

- **Relevant**
- **Meaningful**
- **Joyful**
- **Adaptable**





# CREATIVE LEARNING IN ACTION



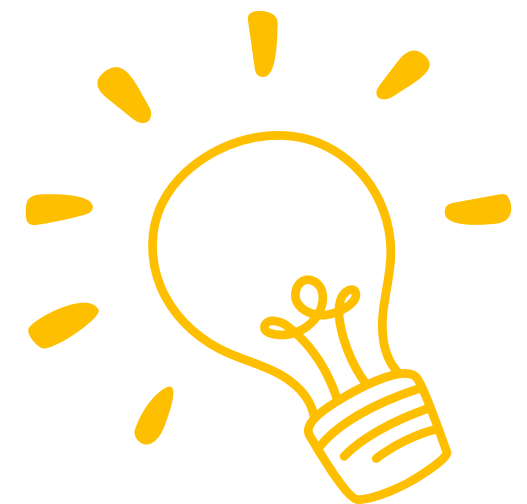
**K - 5**

**Offer real-world applications for mathematics practice**  
**Offer cause and effect that you see and experience in everyday life**  
**Design a class project each quarter**

**6 - 12**

**Choice in reading and writing topics**  
**Video essays**  
**Blogging**

**Student Created Choice boards for any class or unit**  
**Hexagonal Thinking Activities - with a spin**





# CREATIVE THINKING IS A PROCESS!



## A- ATTITUDE SHIFTER

**Why do we have to do this? What's the point?**

**Share knowledge in an environment that encourages:**

- **Belonging**
- **Purpose**
- **Curiosity**
- **Creativity**







# CREATIVE LEARNING IN ACTION - ALL AGES

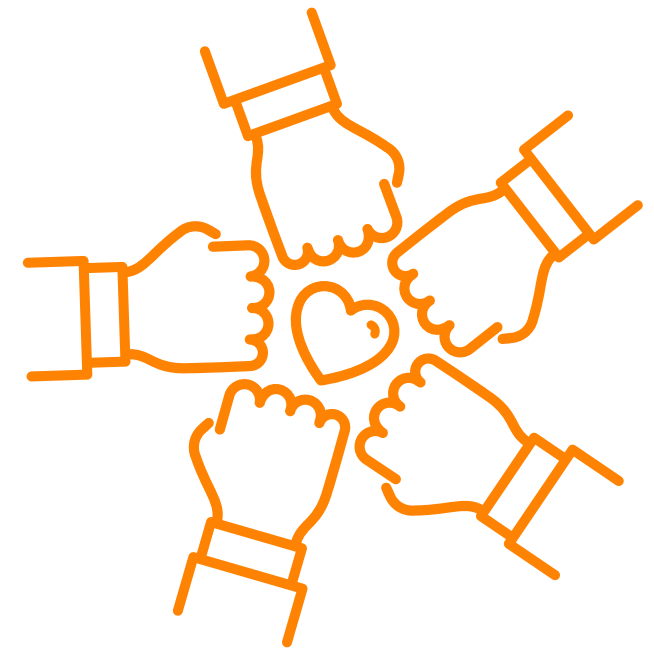


- Be vulnerable yourself - don't be afraid to admit you are having a tough time.
- Acknowledge students' feelings - and your own.
- Allow students to take a time out - Let them take a lap
- Tell students to "Be Creative."
- Give students time to reflect.
- Allow for times of movement.
- Have an area in your classroom for future ideas.
- Design a question zone.





**CREATIVE THINKING IS A PROCESS!**



## **T- TEAM TRANSFORMER**

**Sharing knowledge in a manner that:**

- **Embraces Open-mindedness/Deferring judgment**
- **Communicates with empathy and kindness**
- **Appreciates differences**



# CREATIVE LEARNING IN ACTION - ALL AGES

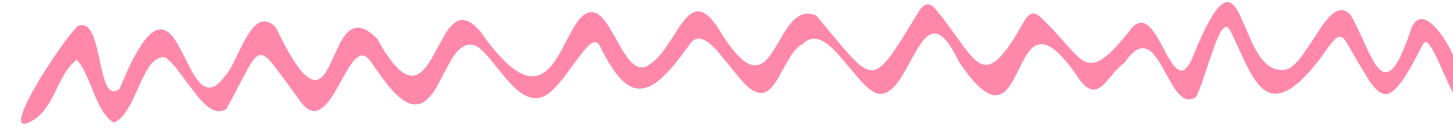


- Consider a student's love language.
- Discover their creative thinking style -  
Ideate, clarify, develop, implement.
- Different groups for different content subjects - reading, writing, and math.
- Let students reflect on the team - their roles, contributions, and improvements.





# CREATIVE THINKING IS A PROCESS!



## E - EVALUATION DESIGNER

**Design methods that evaluate knowledge to:**

- **Encourage curiosity**
- **Offer multiple feedback opportunities**
- **Contribute to meaningful growth**



# CREATIVE LEARNING IN ACTION



K-5

Create a learning portfolio

Peer-to-peer feedback

Class and peer-created feedback

6-12

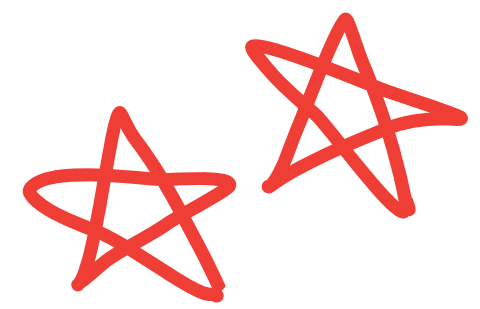
Student created rubrics

Peer-to-peer feedback

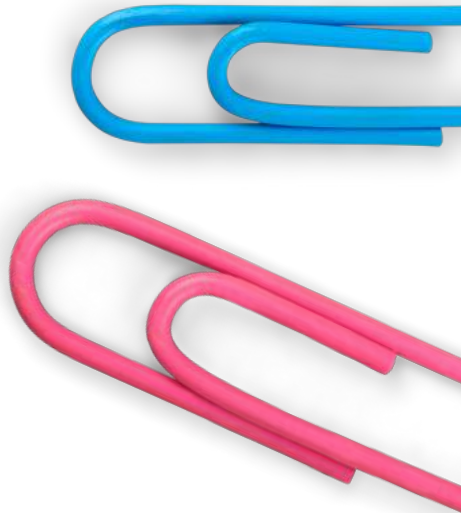
Student-created checkpoints

Revision Opportunities



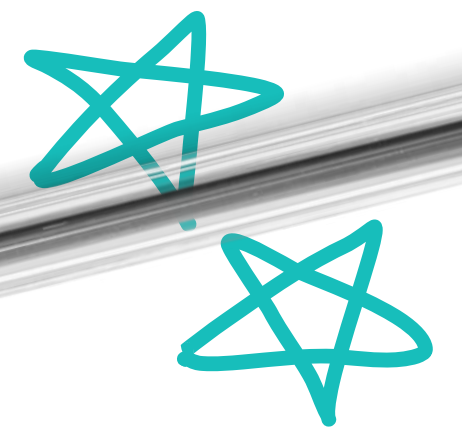
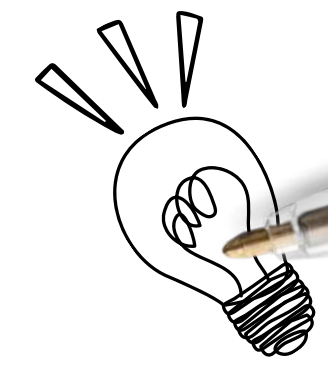


# REMEMBER, THIS IS A PROCESS



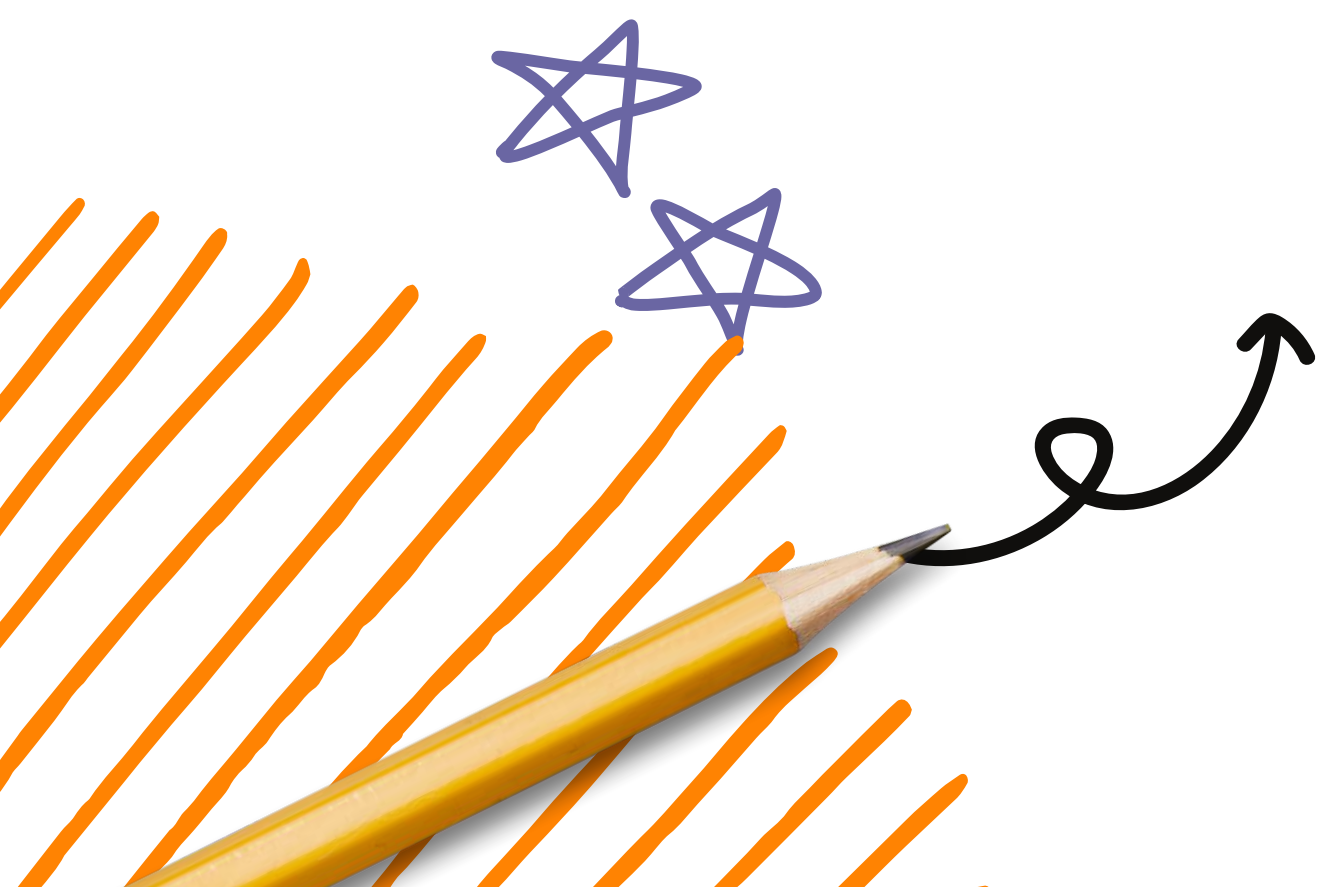
- **Give yourself the grace to make mistakes**
- **Ask for student input**
- **Work with a peer**
- **Join a creative network**
- **Take one lesson at a time**
- **Remember, this isn't about crayons - it's about using knowledge in a challenging and original way**





**MAKE YOUR CLASS  
A CREATIVE LEARNING EXPERIENCE**

**TO REMEMBER!**



# WANT TO LEARN MORE?

Beghetto, R.A. (2020) Creative Learning and the Possible. In: Glaveanu V. (eds) The Palgrave Encyclopedia of the Possible. Palgrave Macmillan, Cham

Burnage, S. (2018, April 25). Creative learning, creative teaching. SecEd. Retrieved January 31, 2023, from <https://www.sec-ed.co.uk/best-practice/creative-learning-creative-teaching/#:~:text=Creative%20teaching%20%E2%80%93%20developing%20our%20pedagogy,their%20learning%20are%20more%20creative.>

Sriram, R. (2020, April 13). The neuroscience behind Productive Struggle. Edutopia. Retrieved January 31, 2023, from <https://www.edutopia.org/article/neuroscience-behind-productive-struggle/>

Houghton Mifflin Harcourt. (2022, June 29). What is productive struggle in the classroom? Retrieved January 31, 2023, from <https://www.hmhco.com/blog/what-is-productive-struggle>





**WE WOULD LOVE YOUR FEEDBACK!**

**SCAN THE QR CODE BELOW AND FILL OUT OUR SURVEY AND RECEIVE A COPY  
OF THESE SLIDES AND A FREE E-BOOK WITH CREATIVE CLASSROOM  
ACTIVITIES FOR YOU AND YOUR STUDENTS**



**THANK YOU!**

**KATIE@CURIOSITY2CREATE.ORG**

