

# Today's Modern Learning Environment: *more than a new coat of paint*

**Ginger Lewman**

Edupreneur & SiloKiller  
Hutchinson Kansas





# Ginger Lewman

Project Based Learning  
Maker Education  
Technology Integration  
Gifted & HighAbility Learners

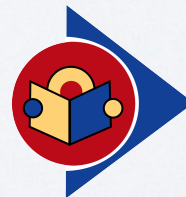
**[www.GingerLewman.org](http://www.GingerLewman.org)**

**[www.LifePracticePBL.org](http://www.LifePracticePBL.org)**

**[www.STEAMmakerCamp.org](http://www.STEAMmakerCamp.org)**



@GingerLewman



**ESSDACK**

Our learners. Their future.

*Hutchinson Kansas*



# Today's Modern Learning Environment:

*more than a new  
coat of paint*

...a story





**DON'T STAY IN SCHOOL**



# Response to School-Related Tasks



**Full Engagement**

HIGH attention  
HIGH commitment

**Strategic Compliance**

High attention  
Low commitment



**Ritual Compliance**

Low attention  
Low commitment



**Retreatism**

NO attention  
Low commitment



**Rebellion**

NO attention  
NO commitment



There is a **zero** percent chance  
that children will learn  
from work they don't do.

Phil Schlechty

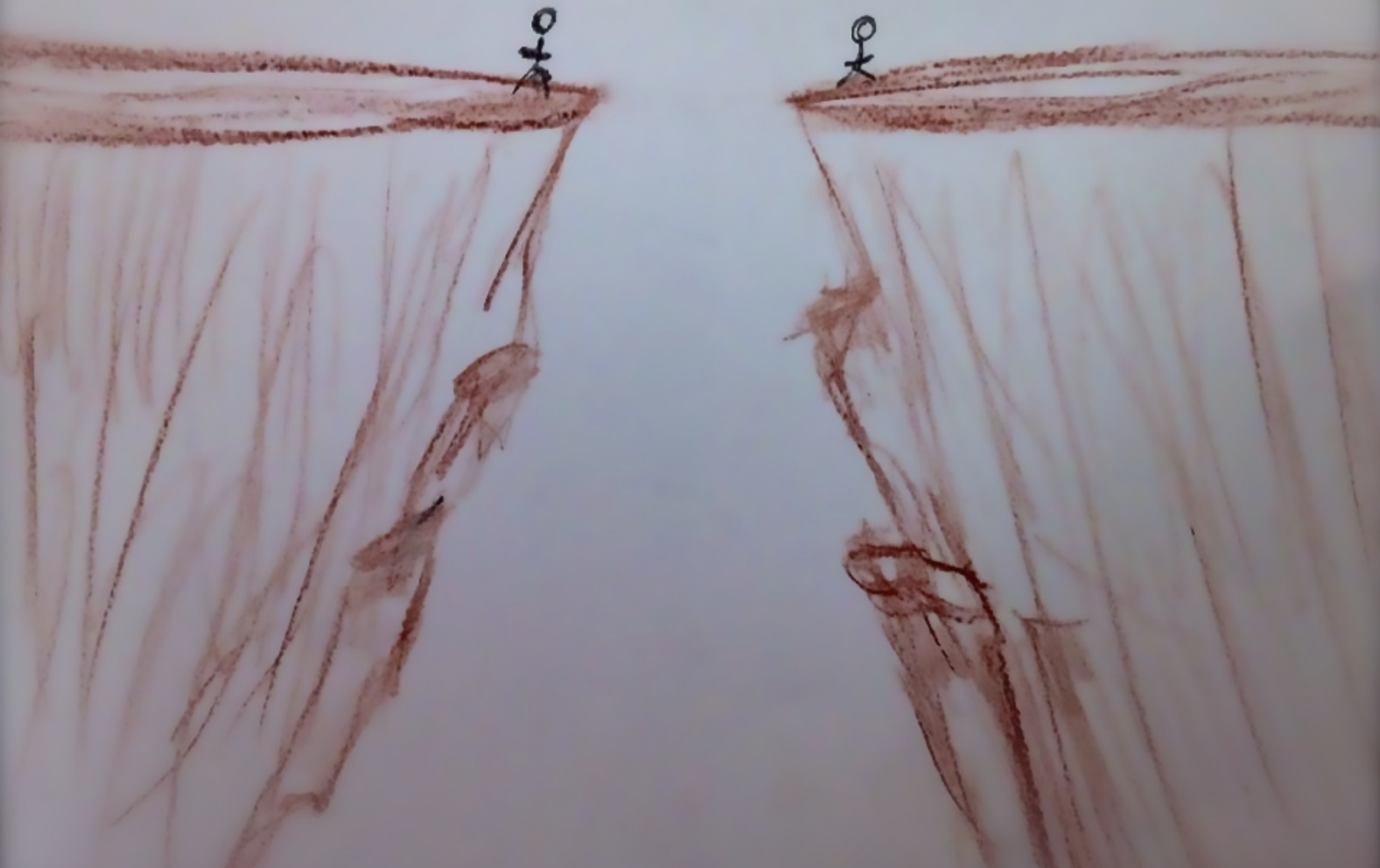


# Bridging the Innovation Gap

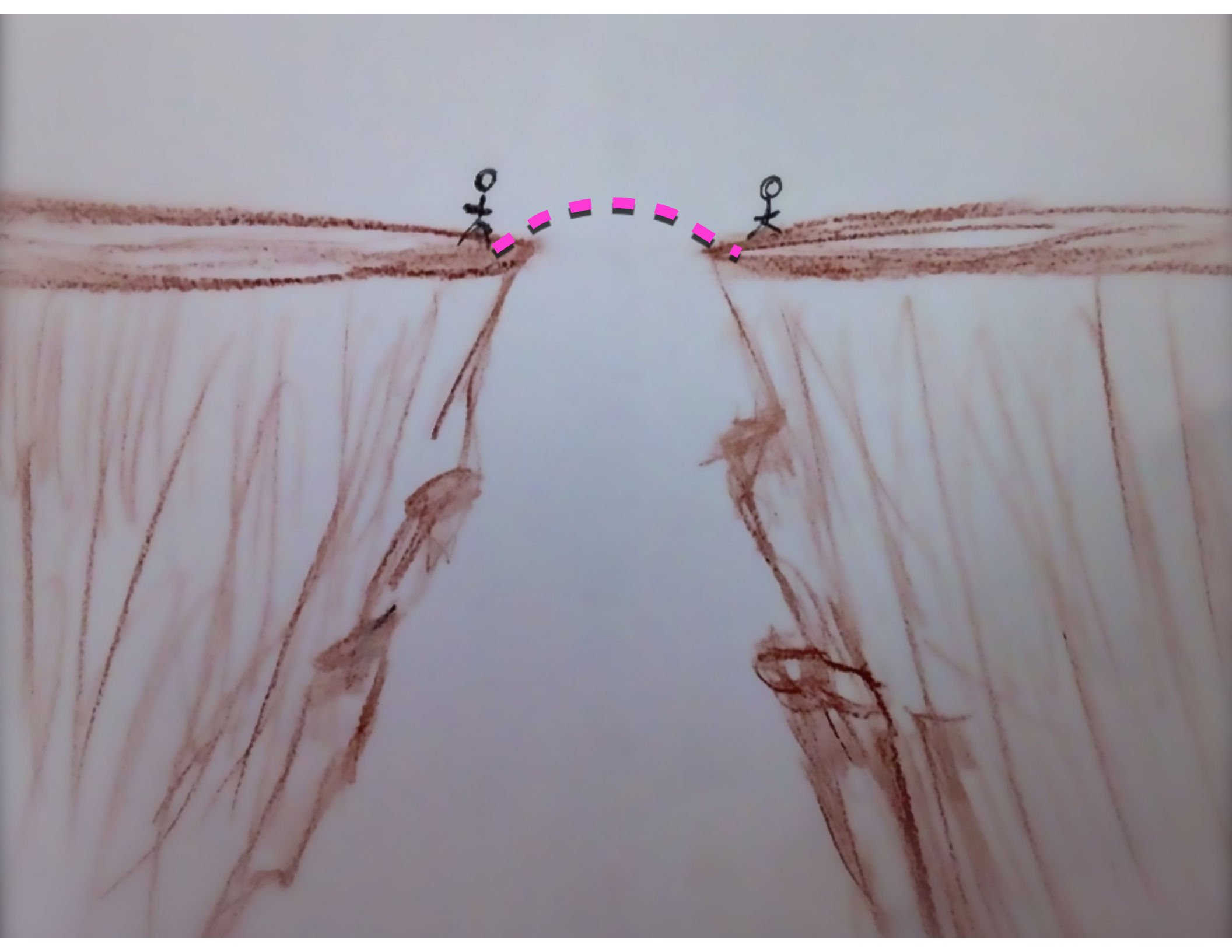


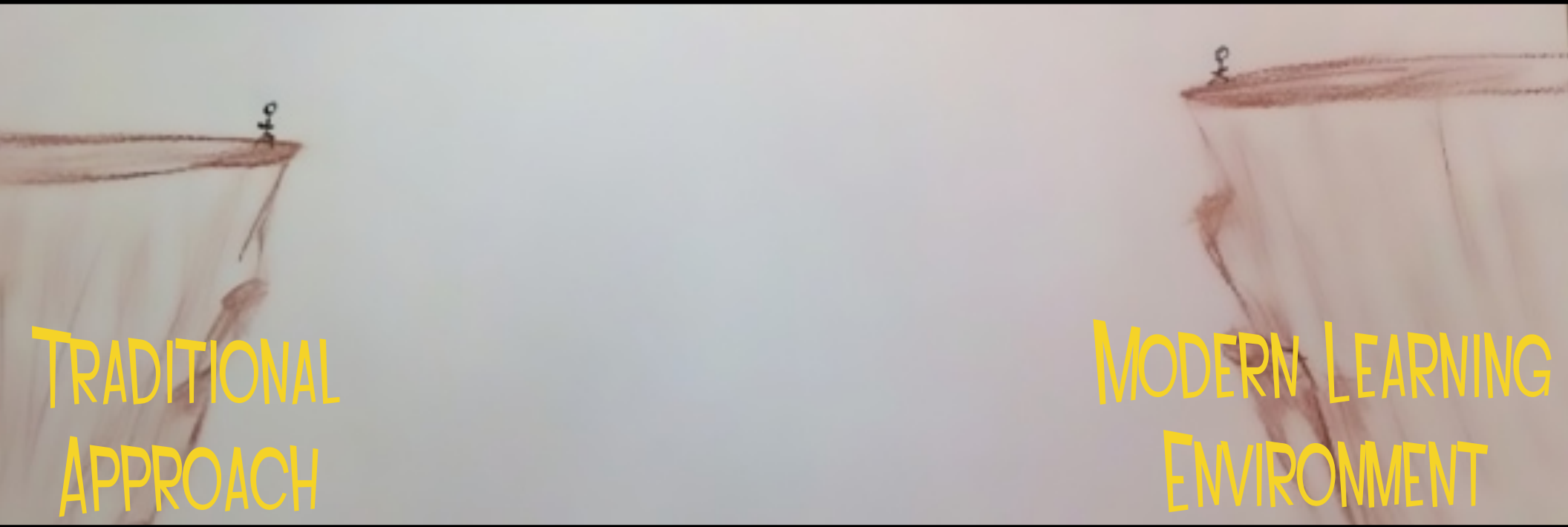
TRADITIONAL  
APPROACH

MODERN LEARNING  
ENVIRONMENT





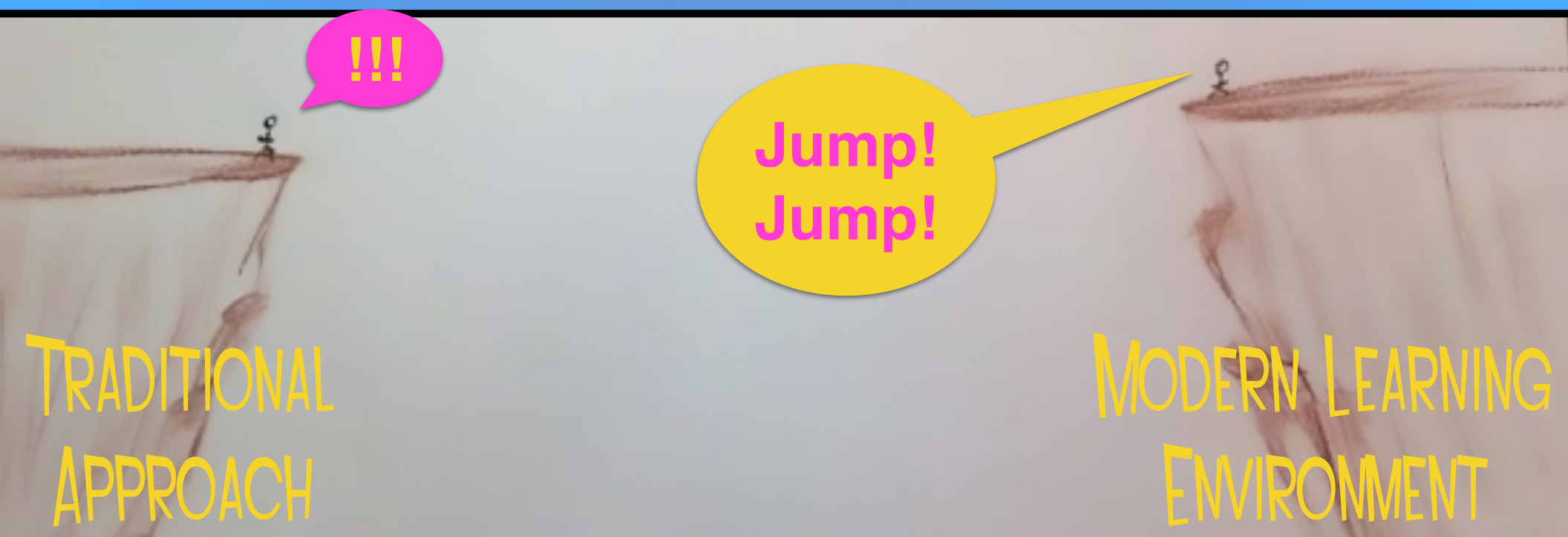




TRADITIONAL  
APPROACH

MODERN LEARNING  
ENVIRONMENT





!!!

Jump!  
Jump!

TRADITIONAL  
APPROACH

MODERN LEARNING  
ENVIRONMENT



TRADITIONAL  
APPROACH

MODERN LEARNING  
ENVIRONMENT



A hand-drawn diagram of a bridge. The bridge is a light beige arch with a black outline. Above the bridge is a dashed pink line that follows the curve of the arch. The bridge is supported by two small black dots at its ends. The background is a light beige color with some faint brown lines.

TRADITIONAL  
APPROACH

MODERN LEARNING  
ENVIRONMENT



*5 pieces of a*  
**Modern  
Learning  
Environment**

1. Open Education Resources
2. Flipped Classrooms
3. Project Based Learning
4. MakerMovement/  
STEAMmaker
5. ...



**Open Education Resources**

<http://goo.gl/z15B8C>

# What is OER



**What is OER?**

<https://goo.gl/umknYg>



text books  
online courses  
simulations  
literature  
interventions  
videos  
*and more*

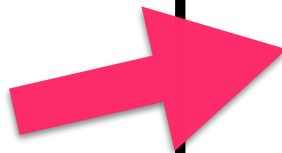


Karen Fasimpaur

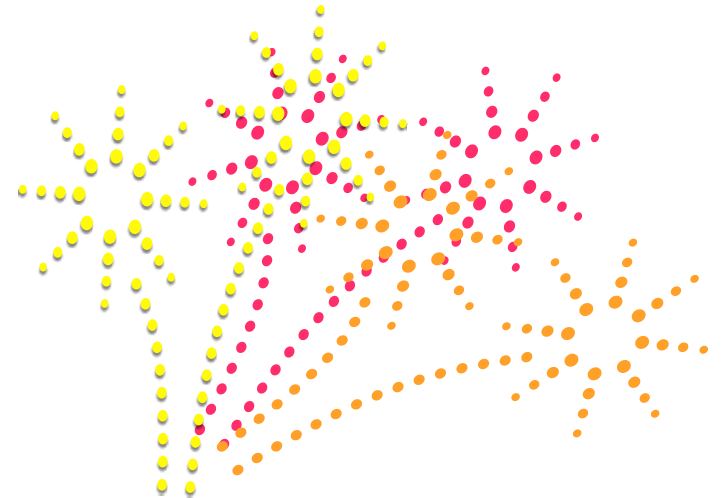
**Open Education Resources**

<http://goo.gl/z15B8C>

text books  
online courses  
simulations  
literature  
interventions  
videos  
*and more*



**social media!**



Karen Fasimpaur

**Open Education Resources**

<http://goo.gl/z15B8C>

# Why Open Education Resources?

- 1) **Cost reduction** of information in classrooms
- 2) **Engagement** and **Empowerment** of learners
- 3) Improves **edu opportunities** for teachers and learners
- 4) Access to the best information anywhere, any time, **regardless of zip code**



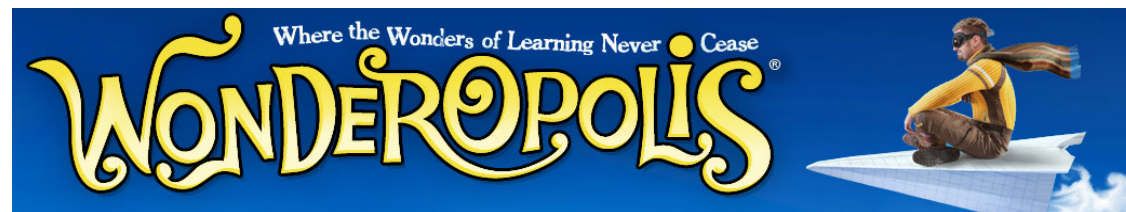
**Open Education Resources**

<http://goo.gl/z15B8C>





- 1) [OERcommons.org](http://OERcommons.org)
- 2) [e-learningforkids.org](http://e-learningforkids.org)
- 3) [en.childrenslibrary.org](http://en.childrenslibrary.org)
- 4) [wonderopolis.org](http://wonderopolis.org)
- 5) [www.abcya.com](http://www.abcya.com)



# Open Education Resources

# Discussion Point

What would we  
need to be true  
to shift toward OER?



**Open Education Resources**

<http://goo.gl/z15B8C>

# Questions **Strong Leaders** Ask About Open Education Resources

- 1) How do we ensure adequate access (bandwidth/hardware) to OER?
- 2) How do we ensure educators are confident to leverage the full benefits of OER?



**Open Education Resources**

<http://goo.gl/z15B8C>

A person in a kayak is seen from behind, paddling on a body of water with small, choppy waves. The person is wearing a dark jacket and is positioned in the upper left quadrant of the image. The water is a mix of green and blue tones, and the sky is a pale, hazy blue.

**KEEPING TOOLS OF  
COMMUNICATION  
OUT OF THE HANDS  
OF LEARNERS ISN'T  
CALLED SAFETY.**

**IT'S CALLED  
ISOLATION.**

**~ GINGER LEWMAN**



BUT THAT'S JUST THE START...

Now that we have access to information,

**NOW WHAT?**

# **Flipped Classrooms**

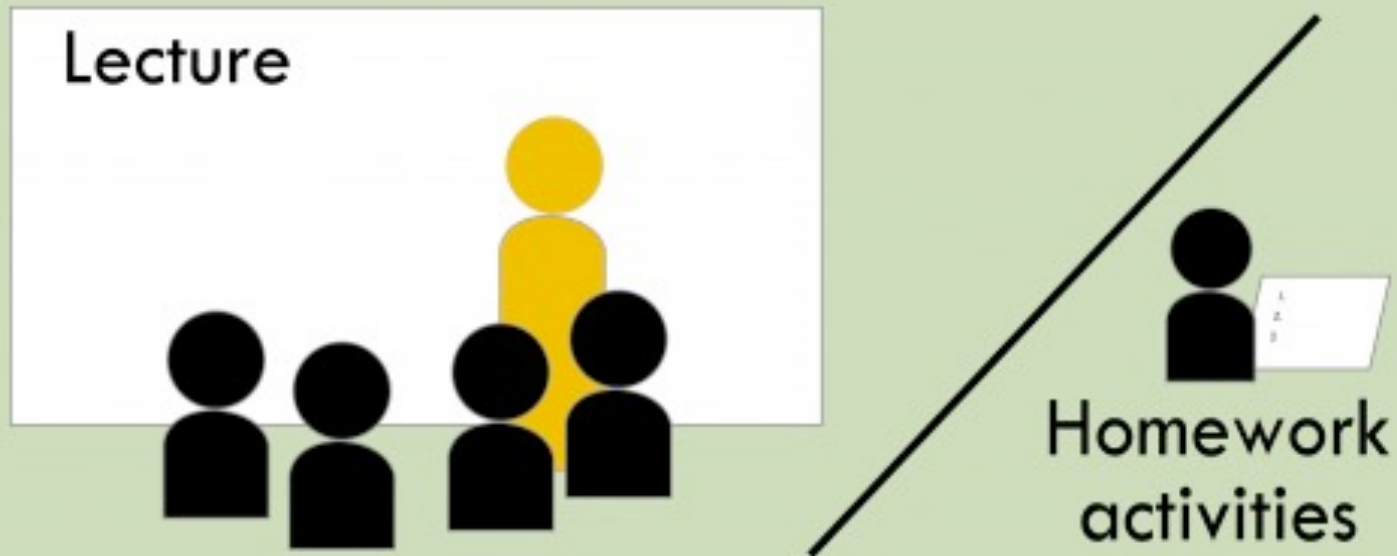
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# **Flipped Classrooms**

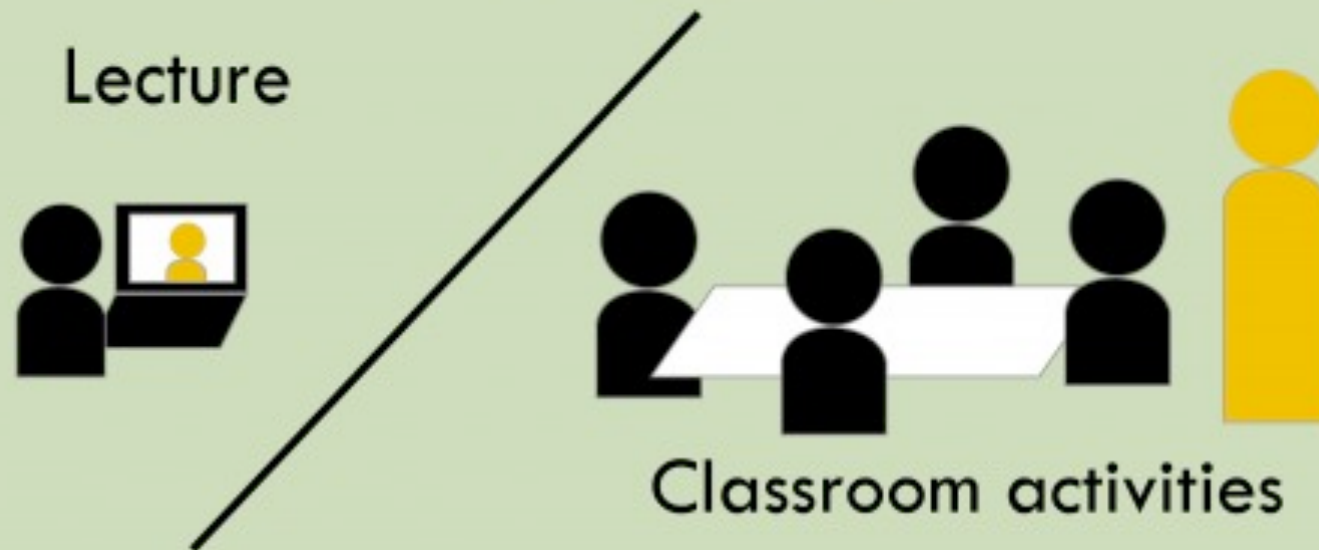
**Great Flipped resources**

[goo.gl/jTdy8j](https://goo.gl/jTdy8j)

# TRADITIONAL



# FLIPPED



Flipping the Classroom. (n.d.). Retrieved December 1, 2014, from <http://www.washington.edu/teaching/teaching-resources/engaging-students-in-learning/flipping-the-classroom/>



# Flipping, Elementary!

## 1) TEAM-TEACH WITH YOURSELF.

- 2) Make your direct instruction video one station.
- 3) **WSQ** — What/Where, Summarize, Question
- 4) Flip only once every couple of weeks.



**Flipped**  
**El!bb6q**

**Great Flipped resources**

[goo.gl/9FVwge](http://goo.gl/9FVwge)

# Questions **Strong Leaders** Ask About Flipped Classrooms

- 1) How will we ensure all kids have the opportunity to learn with the videos?
- 2) How will we ensure educators are ready for “learning time” to look/sound different?

**Flipped**  

---

**El!bbeq**

**Great Flipped resources**  
[goo.gl/jTdy8j](http://goo.gl/jTdy8j)

Discussion Point

What is your hunch about  
Flipped Classrooms?

**Flipped**  

---

**El!bbeg**

**Great Flipped resources**  
[goo.gl/9FVwge](http://goo.gl/9FVwge)

# Passions & Personal Interests

are

*sparks*

which ignite  
deeper  
learning

# Project Based Learning

Not the same thing as “doing projects.”



**[www.LifePracticePBL.org](http://www.LifePracticePBL.org)**

[bie.org](http://bie.org)

[edutopia.org/](http://edutopia.org/)





“Doing Projects”

vs



PROJECT BASED LEARNING

1. Driving Question or  
Exciting Challenge

8. Celebration &  
Post-project wrap-up

2. A Need to Know

7. High-Stakes  
Presentations

3. Research & Think

4. 21st Century Skills

6. Soft & Hard Deadlines

5. Student Choice & Voice



1. Driving Question & Challenge

**Organizing/Planning**

2. A Need to Know

**Prioritizing**

3. Inquiry & Innovation

**Research,**

**Organization,**

**TimeManagement**

4. 21st Century Skills

**Collaboration**

**Productivity**

**Processing Thinking/  
Learning**

5. Student Choice & Voice

7. Authentic Presentations

**Publishing,  
Presenting**

**Persistence,**

**TimeManagement,**

**Evaluation**

8. Collaboration & Post-project wrap-up

**Evaluation,  
Collaboration**



## DRIVING QUESTIONS

SS

What was the role and strategy of the navy for both the North and South, starting with the Trent Affair? Did the naval blockade affect the outcome of the war? What was the role of the Navy along the Mississippi River? What were the naval (and other) technological innovations created during this war? How did other nations get involved? What covert spy operations affected the outcome of the Civil War? Why was Charleston Harbor selected for the attack?

Sci

Why were the crew have a candle lit in the Hunley? Explain the effects of the lack of oxygen on the human body. Explain water displacement and how manned iron submarines were able to rise and lower in water? How do/did explosives work under water? What are the challenges of raising a wreck of this age?

M

In a vessel the size of the HL Hunley, how much air is available in terms of cubic feet and in terms of time, based on the nervous breathing of its crew? Figure the speed at which this ship would have to travel in order to deploy and retreat from from the Housatonic! Compare the Hunley's hydrodynamics to modern-day submarines.

Rdg

Read Historical fiction (navy related or not); Research primary documents; Listen to "Raising the Hunley" or other related non-fiction as students are working

Wri

Students write a script for a digital (or analog) story, historical or historical fiction. This can be a radio play, reader's theatre, or a series of podcasts. Create a display for your school or local library or museum. Conduct interviews with modern-day submariners.



© 2011 eesack.org

## THE SOUTH'S CIVIL WAR SUBMARINE

Tell the story of the  
Confederate Ship,  
H.L. Hunley

StoryTellers

Set 6



LifePracticePBL.org









- ## Packing List
- walkie-talkie
  - map
  - first aid kit
  - Sunscreen
  - water bottle
  - flashlight SAVE
  - umbrella
  - watch
  - binoculars
  - sunglasses SAVE
  - camera
  - compass
  - Clothes
  - t-shirts
  - shorts or lightweight pants
  - tennis shoes SAVE
  - brimmed hat
  - backpack
  - light jacket
  - scarf
  - socks
  - camoflaue clothes yellow, tan, brown
  - passport





Need to know?

Where could  
we find it?





A photograph of a teacher with glasses and a student working together at a desk in a classroom. The image is overlaid with a solid pink color and several white diagonal lines of varying lengths. The text is written in a bold, white, sans-serif font, slanted upwards to the right.

**THE BEST HANDS-ON  
CLASSROOMS  
HAVE GREAT  
HANDS-OFF  
TEACHERS.**

**[WWW.GINGERLEWMAN.ORG](http://WWW.GINGERLEWMAN.ORG)**

# Why Project Based Learning?

- 1) Students begin to take **responsibility** for learning because their **voice/choice** are valued.
- 2) **Integration** and **real-world application** of **content** and **skills**
- 3) Students' **individual** needs are the root of success.
- 4) **Collaboration** and **community** is essential.



[www.LifePracticePBL.org](http://www.LifePracticePBL.org)

[bie.org](http://bie.org)

[edutopia.org/](http://edutopia.org/)

# Questions **Strong Leaders** Ask About Project Based Learning

- 1) How will we ensure that it's PBL and not “doing projects?”
- 2) How will we internalize that it's not a “strategy” but a way of approaching teaching and learning?
- 3) In what ways will we best support our community's shift?



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# Discussion Point

How might assumptions about **standards** and **test scores** affect our conversations surrounding PBL?



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[bie.org](http://bie.org)

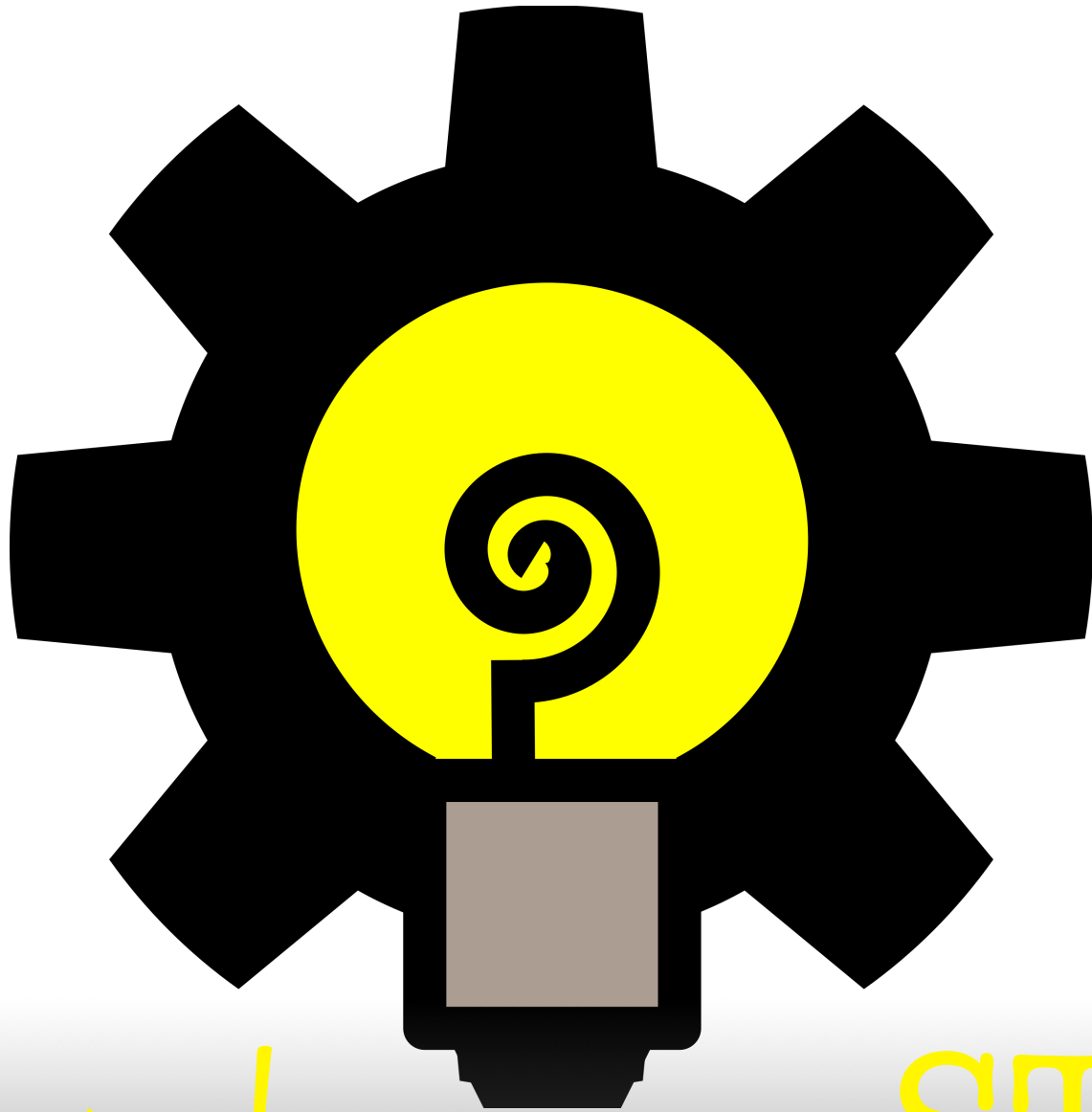
[edutopia.org/](http://edutopia.org/)



**As a teacher,  
I'm a resource,  
not THE source.**

**~ GINGER LEWMAN**





*merging classroom STEM  
with MakerEducation*



***STEM to STEAM to Maker!***

**Makerspaces**, are creative, DIY spaces where people can gather to **create, invent, and learn**.

...they often have **3D printers**,  
**software, electronics**,  
craft and **hardware** supplies  
and **tools**, and more!

***STEM to STEAM to Maker!***



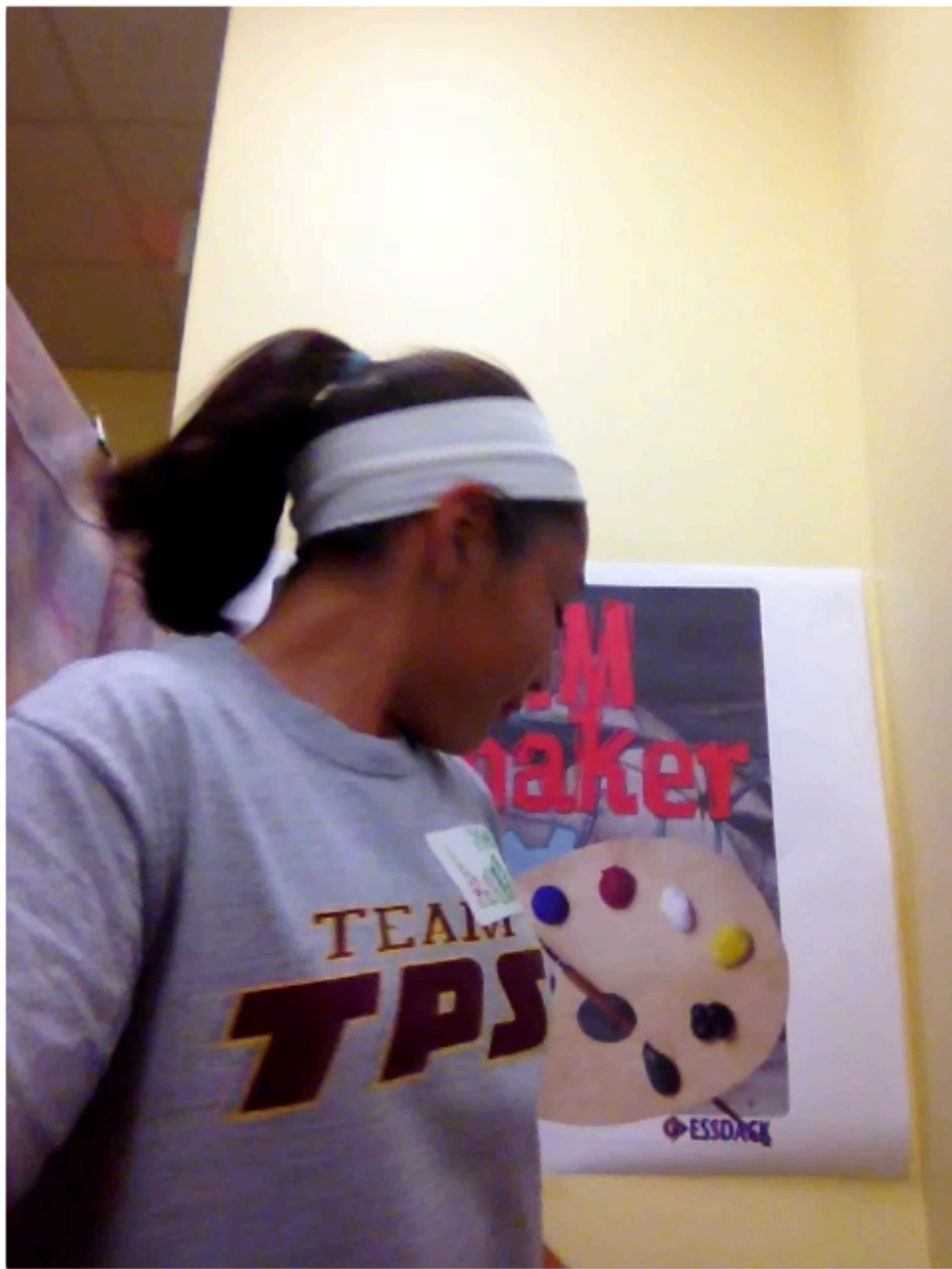
**makerspaces as**

**petri dish**

**vs**

**side dish**



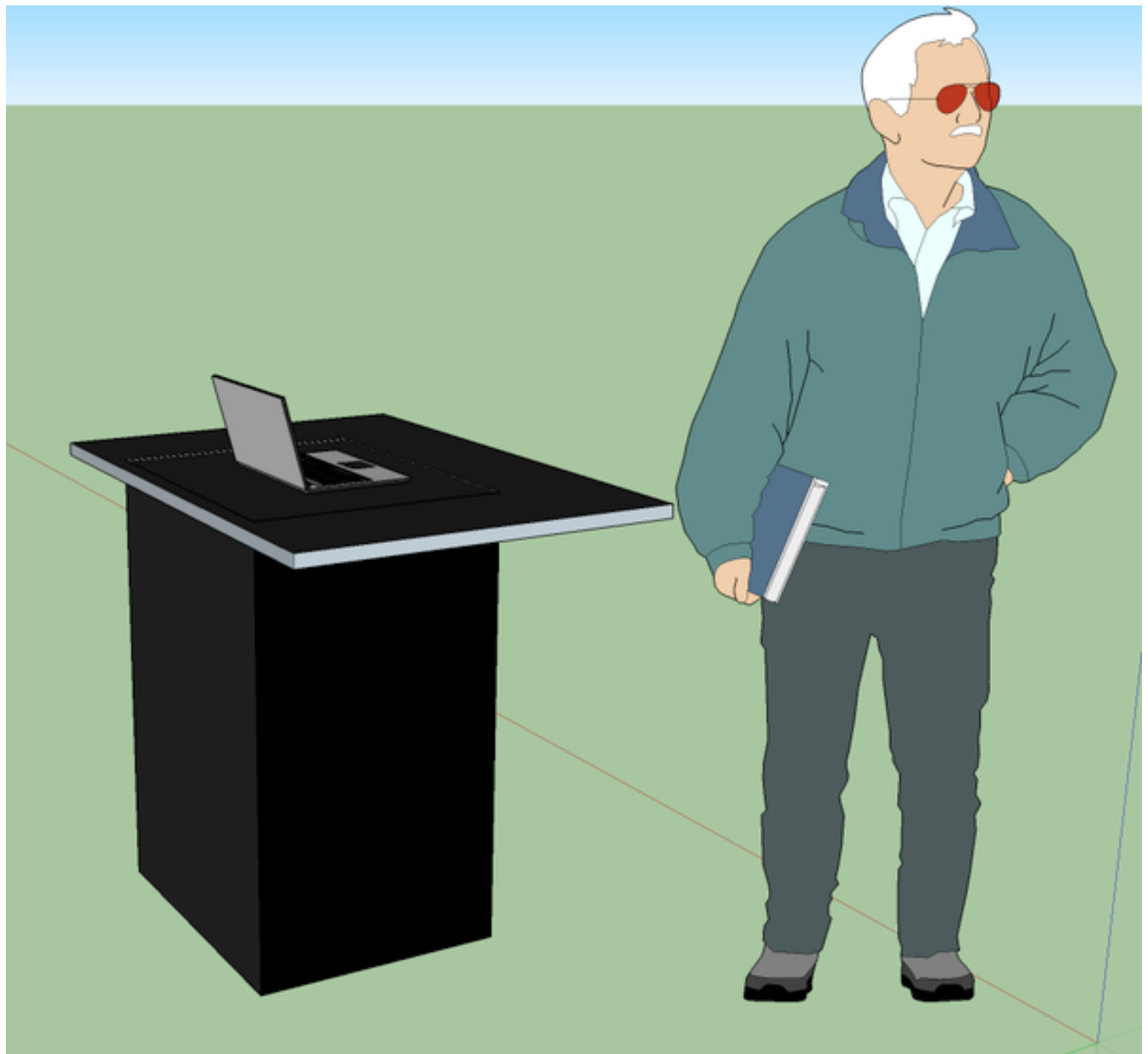




**"THE PAIN YOU FEEL FROM  
FAILURE IS DIRECTLY RELATED  
TO THE PASSION  
YOU HAVE FOR WHAT  
YOU ARE DOING."**

**~ THURL BAILEY**



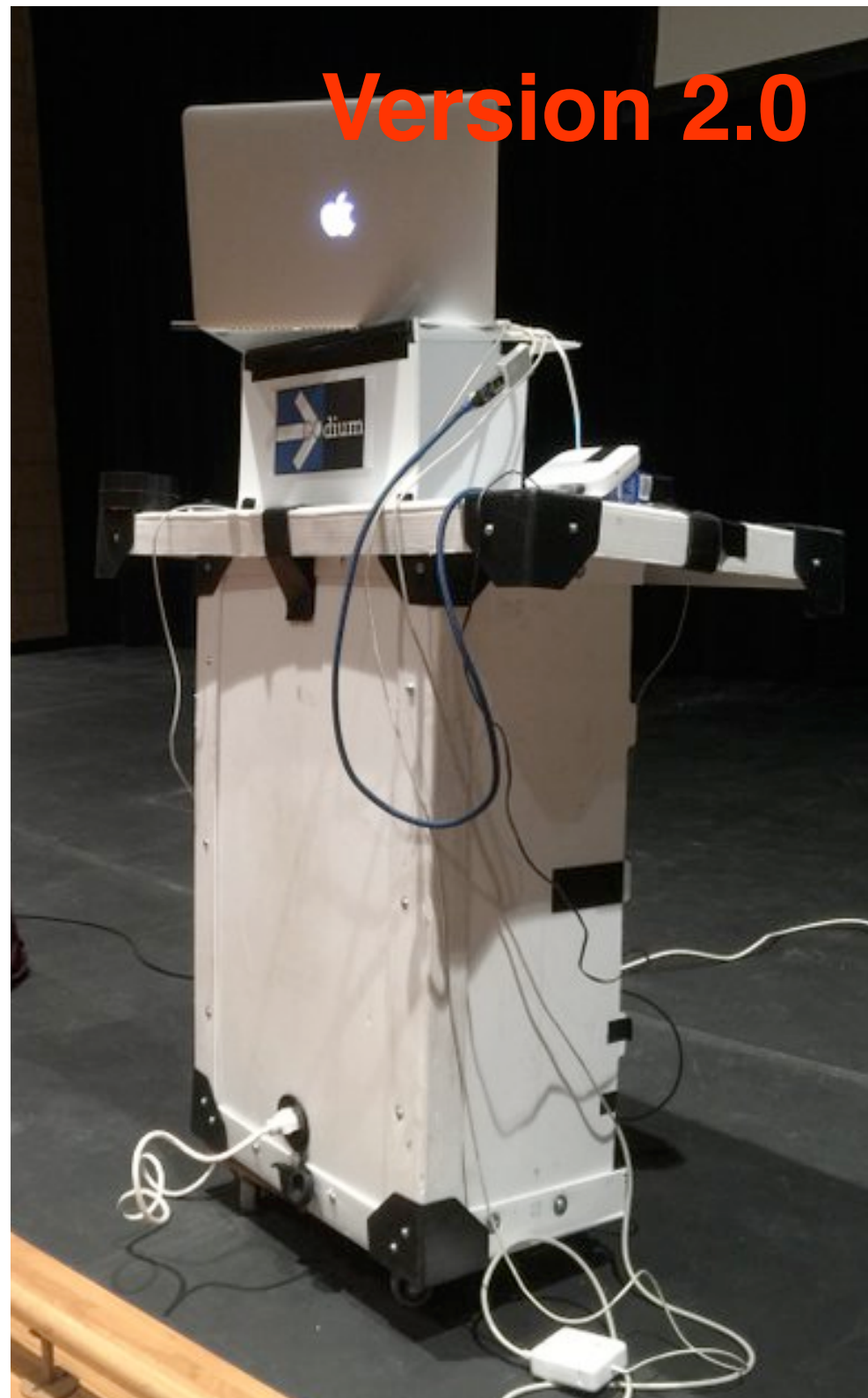




Version 1.0



Version 2.0











on Twitter:  
**@GoGodium**

*There once was a school far out west  
where the kids made things were the best  
they started selling  
the rest is worth telling  
they earned bucks to feather their nest.*

*Kevin Honeycutt*







April 15th 2016 Projects Due 8/24/15

Electronics

- Golden Basic Box \$130
- Golden Laptop Stand \$15
- Golden Wood Platform \$30
- Golden Wood Order Boxes \$50
- Golden Stool 1/2" \$40
- Golden Stool 3/4" \$75

House Plans

- 1st hr CLEAN SHAVE
- 2nd hr
- 3rd hr
- 4th hr
- 5th hr
- 6th hr
- 7th hr

Projects Due

- Teena L. Martin?
- Christine Baugh
- CR 1:32:11.9 + 6"
- OK 2:06:45min
- BAO 2:23:25min
- DK 3:00 min Actual 2:51
- BK 2:03 42 min

1209



# Why Maker Movement?

- 1) Students become **makers**, not just consumers.
- 2) Kids become **inventors** and **engineers** with a purpose.
- 3) **Creativity** and **Tinkering** abound!
- 4) Community **partnerships** emerge.
- 5) It's the next-level development of **STEM**.



**MakerEd Resources**  
[makered.org/resources](http://makered.org/resources)  
**[STEAMmakerCamp.org](http://STEAMmakerCamp.org)**

*5 pieces of a*  
**Modern  
Learning  
Environment**

1. Open Education Resources
2. Flipped Classrooms
3. Project Based Learning
4. MakerMovement/  
STEAMmaker
5. ...

*5 pieces of a*  
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Learning  
Environment**

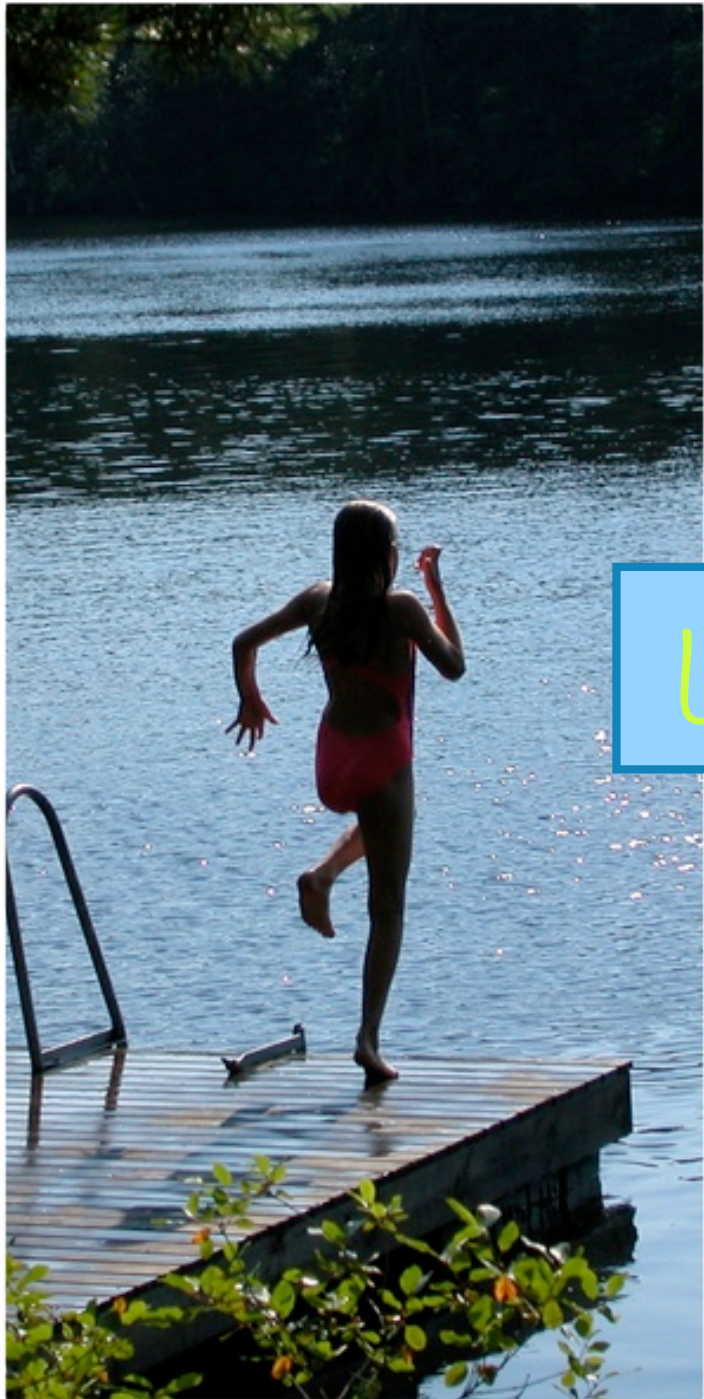
1. ~~Open Education  
Resources~~
2. ~~Flipped Classrooms~~
3. ~~Project Based Learning~~
4. ~~MakerMovement/  
STEAMmaker~~

**5. YOU.**



**Is it a new fence?  
or  
just a *new coat  
of paint?***





## Levels of Implementing Change





An aerial photograph of a baseball field. A large red arrow points from the right side of the frame towards the baseline, specifically to a spot where a player is standing. The field is green with a visible infield and outfield. A paved path curves around the right side of the field. Several people are visible on the field and along the path.

**IN ORDER TO BLAZE A TRAIL,  
YOU FIRST HAVE TO  
STEP OUT OF LINE.**

**~ GINGER LEWMAN**

**I WANT TO TOP  
EXPECTATIONS.**

**I WANT TO  
BLOW YOU  
AWAY.**







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Maker Education  
Technology Integration  
Gifted & HighAbility Learners

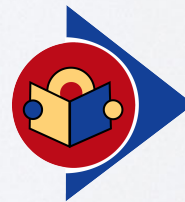
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