MSP STEM

Educational Technology

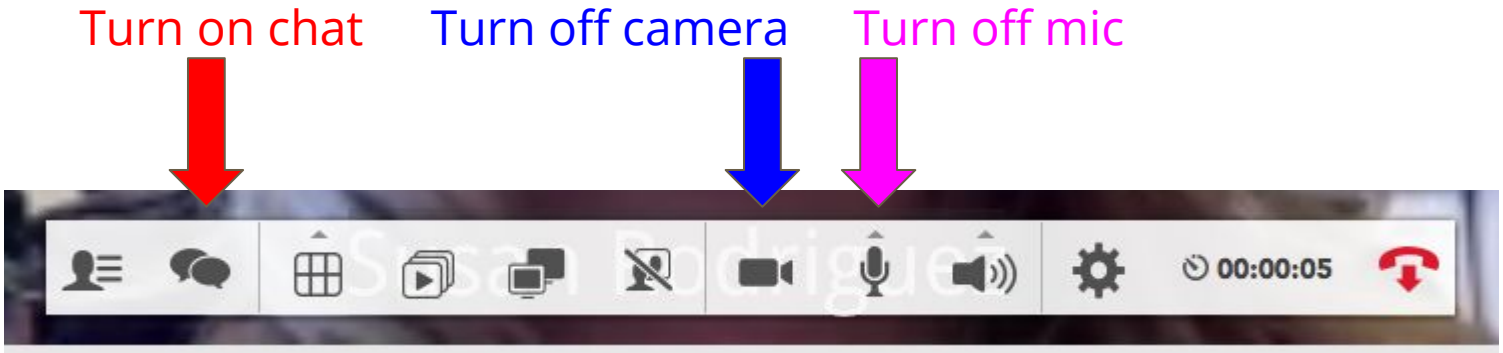
Vidyo Link

http:/

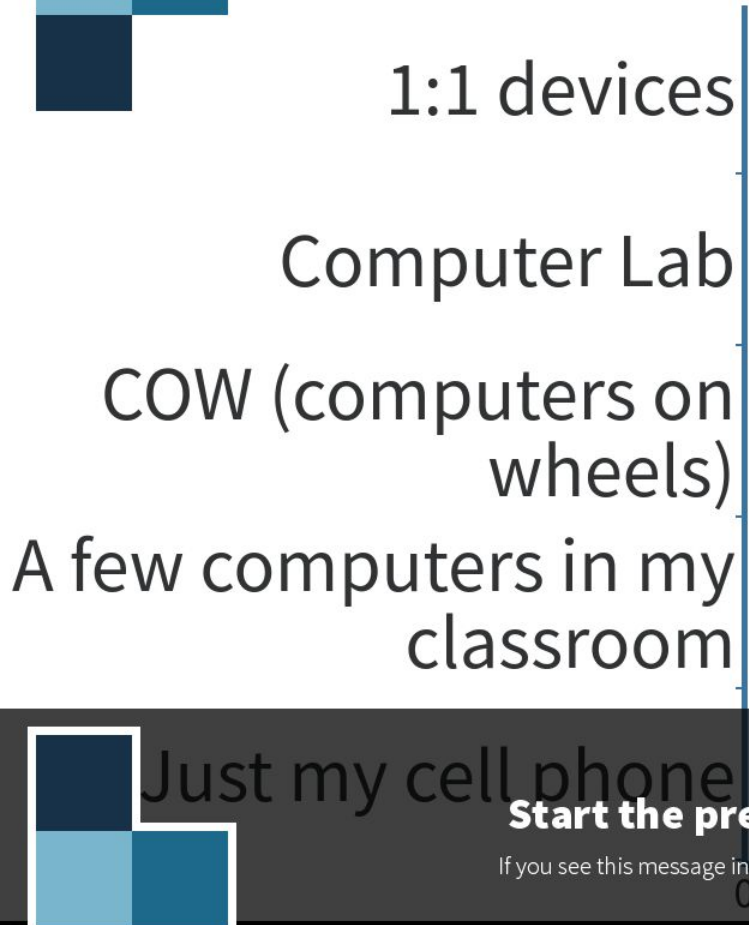
/video.acsbc.net/flex.html?roomdirect.html&key=EvqG4wiKwIwPrkofnVlWyOE7y4

Housekeeping

Feel free to take screenshots
This presentation **will be** available in the Google Drive



What technology do you have access to at school?



I have access to Chromebooks and a small computer lab...

Start the presentation to activate live content

If you see this message in presentation mode, install the add-in or get help at PollEv.com/app

Poll Everywhere

What Ed Tech do you use? (specific sites and/or programs)

I use Google docs, sheets, slides and sites. I have only used PPT with my students so far. I also use MovieMaker.

Start the presentation to activate live content

If you see this message in presentation mode, install the add-in or get help at PollEv.com/app

Poll Everywhere

ELA Standards: Not just Reading and Writing

Speaking and Listening: Flexible Communication and Collaboration!

Distribution of Communicative Purposes by Grade in the 2011 NAEP Writing Framework

Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

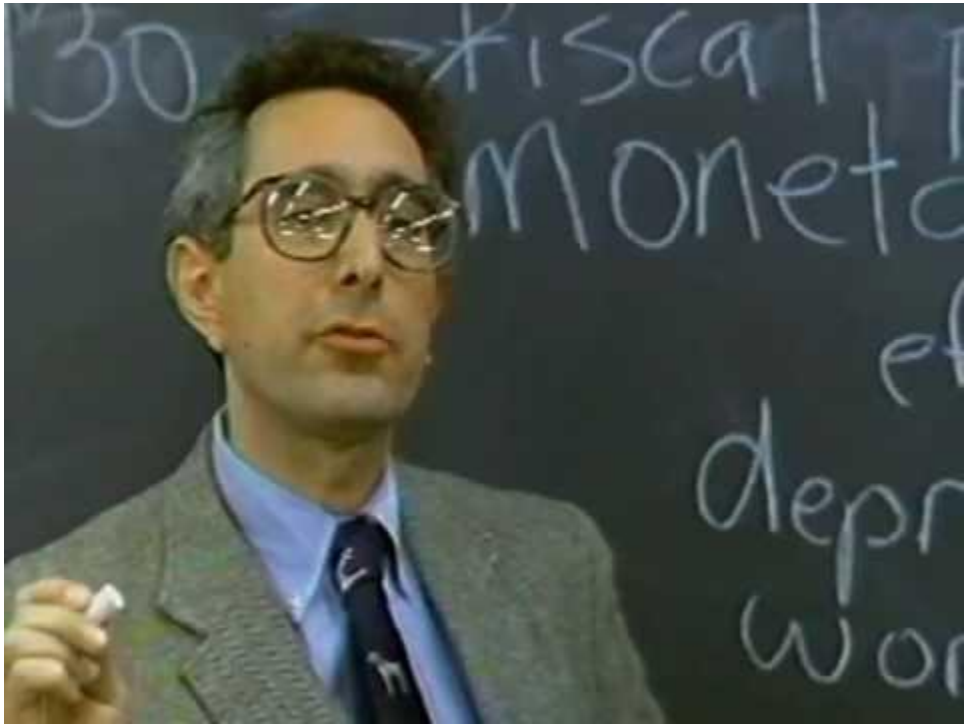
Source: National Assessment Governing Board. (2007). Writing framework for the 2011 National Assessment of Educational Progress, pre-publication edition. Iowa City, IA: ACT, Inc.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Learner-Centered Environment: What it's NOT!

https://youtu.be/uhiCFdWeQfA

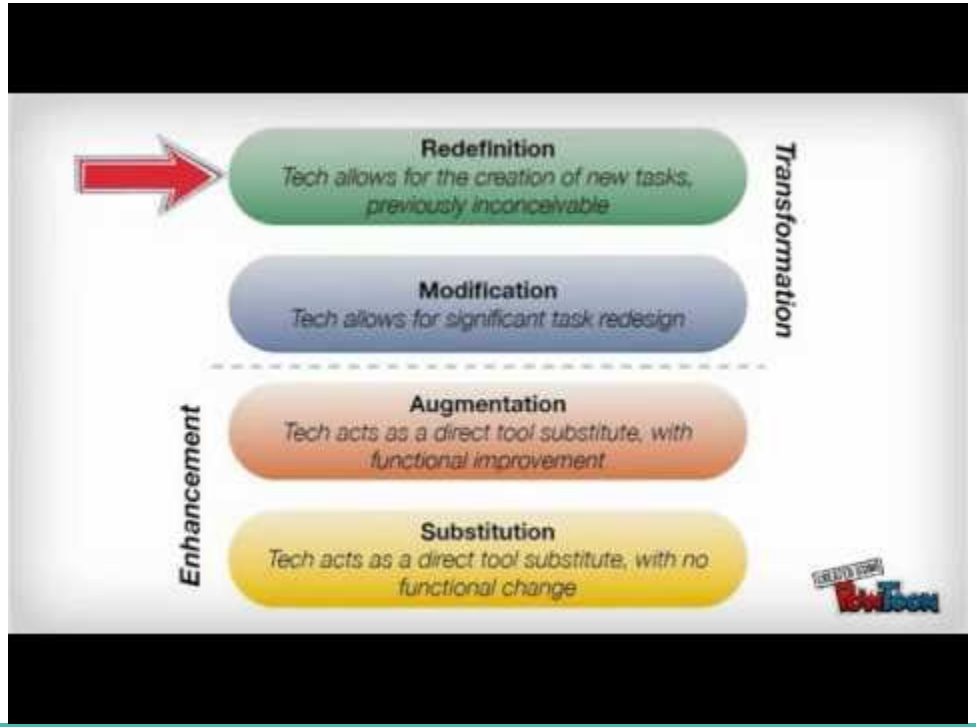


Learner-Centered Environment: What it's NOT!

https://youtu.be/ryeDfr5RnWE

Learner-Centered (with Ed Tech): What it IS!

https://youtu.be/OBce25r8vto



Start Here

COMMUNICATOR

Understanding and communicating ideas...

CRITICAL THINKER

While thinking critically to find a solution...

COLLABORATOR

And working with others to develop a product and extend one's knowledge...

CREATOR

To produce artifacts that are a reflection of the creators' imagination, strengths and personal interests.

What you are already using....

From our Poll Everywhere question, I see that you already use:

In our STEM workshops, we have used:

- ★ PowerPoint
- ★ Prezi
- ★ Kahoot
- ★ Poll Everywhere
- ★ Google
  - Slides
  - Surveys
  - Drive

Creativity: From “Consuming” to “Creating”

“Students entering Kindergarten this year will likely enter job fields upon graduation that have not yet been developed, using knowledge that has not yet been discovered and tools that have not yet been engineered.” (*Science and Children*, October 2013)

How to build a log cabin on Minecraft

18 views • 2 years ago

How to Make a Lego Candy Machine That Really Works

2,141 views • 2 years ago

How to Build a Lego candy grabber

412 views • 2 years ago

How to Make a Lego Arcade Game

457 views • 2 years ago

Just some examples of the YouTube tutorials my 7 and 6 year old sons have made. Kids WANT to create!

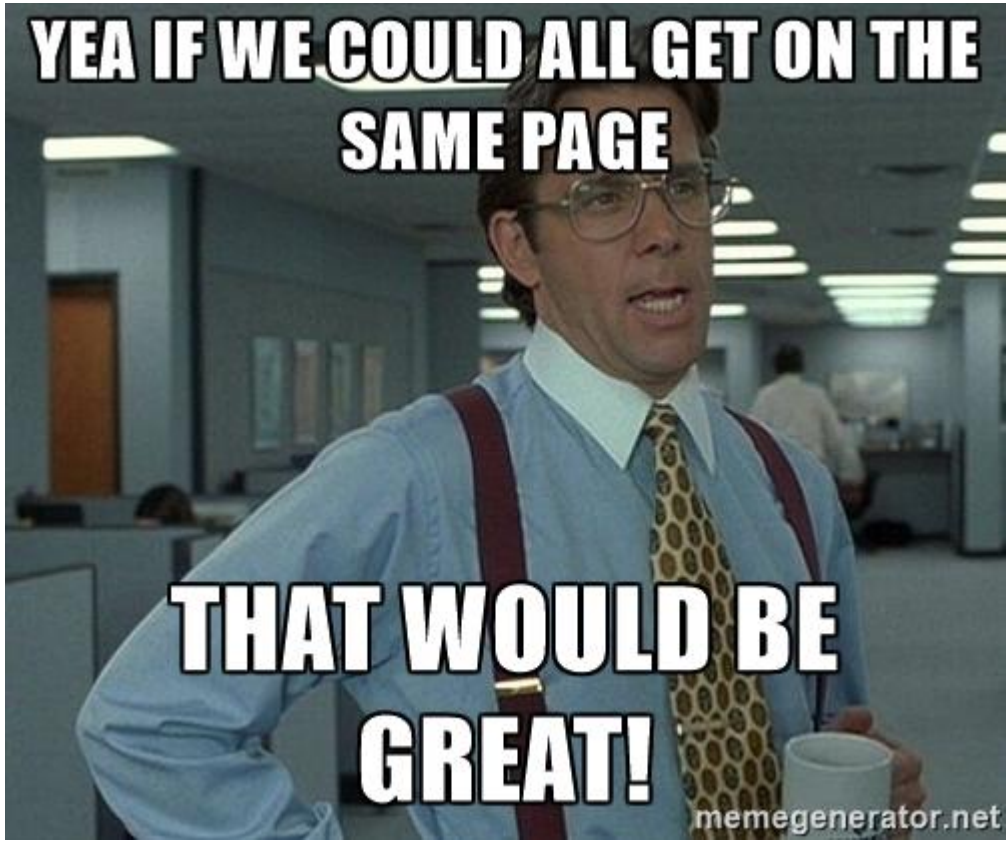
Tonight, we are going to take a closer look at:

- ★ Flipped Classroom Resources
  - NearPod
  - BlendSpace
- ★ Blog/Websites:
  - Weebly
  - WordPress
- ★ Presentation Apps/Sites:
  - Prezi
  - PowToon
- ★ Publishing Books:
  - StoryBird
  - iBooks

NearPod

Does NOT need to be 1:1

- ★ Ever struggled to keep all students “on the same page”?
- ★ NearPod keeps everyone together
- ★ Embed assessments/activities
- ★ Virtual field trips
- ★ Pre-made lessons (yasssss!)
- ★ Import your PowerPoints



Let’s see it in various classrooms

https://youtu.be/qk----------O5T5MOXN4

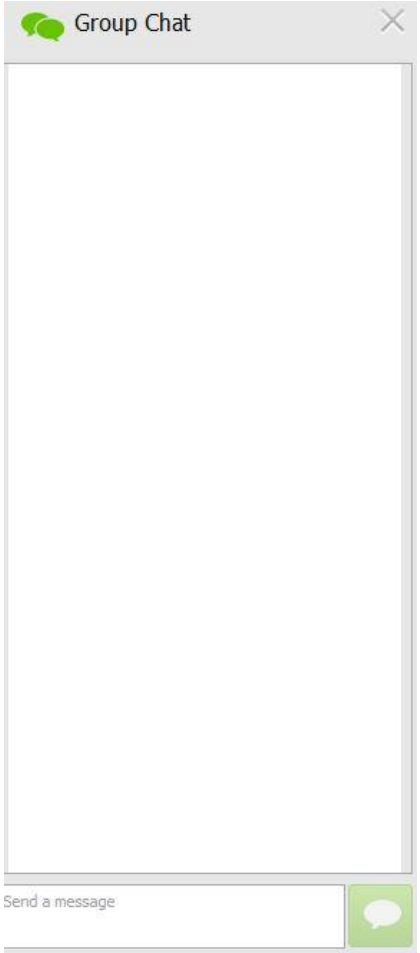
Let’s try it together now:

- ★ Open a new tab on your internet browser.
- ★ Go to nearpod.com
- ★ Click Join session
- ★ Enter PIN:

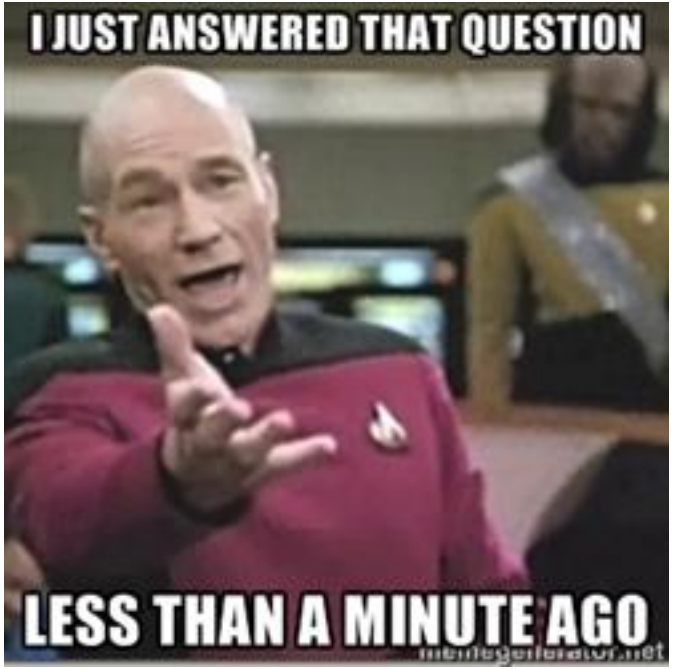
Ok, your turn!

- ★ Open a new tab on your internet browser.
- ★ Go to nearpod.com
- ★ Click “Explore Lessons” at the top
- ★ Search for a lesson you might use in the month of December (you might want to start with “top free”)
- ★ Remember to save to your library if you want to keep it for later
- ★ Let’s take 3 minutes

- ★ **When you have found a lesson you want to use this month, type the name of the lesson in the chat box.**



How many of you have said the same thing 20 times in the same class period?



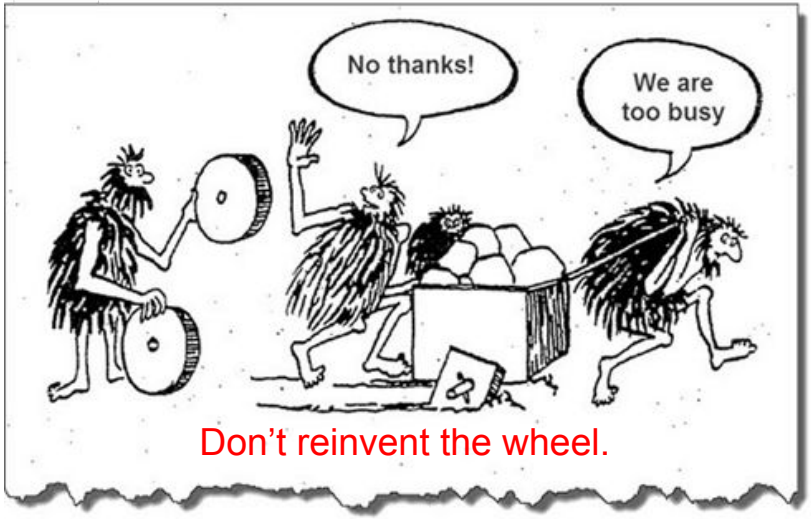
BlendSpace: An example

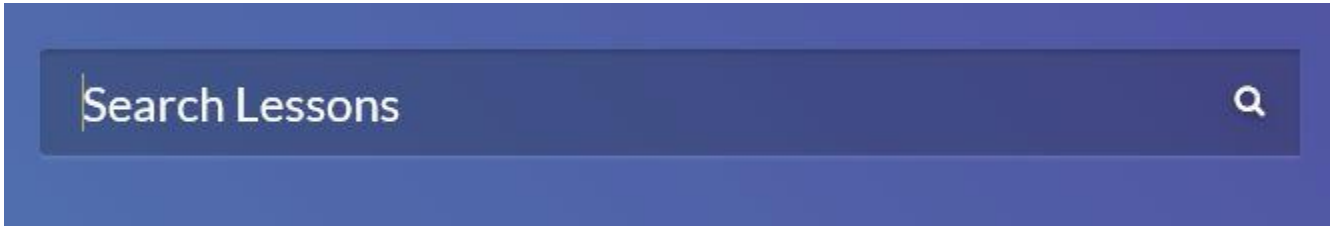
I solved that problem by flipping my classroom. There are many different platforms you can use (your district might even have an LMS for you). But, I found BlendSpace to be uber easy to use.

- Go to BlendSpace.com
- Click “Lessons Library” at the top
- Search “Wind Power” and find our lesson
- Click the lesson and push “play” at the top

BlendSpace

- ★ Go to BlendSpace.com
- ★ Click LessonsLibrary at the top
- ★ Search for a lesson you might use in the month of December
- ★ Let's take 3 minutes



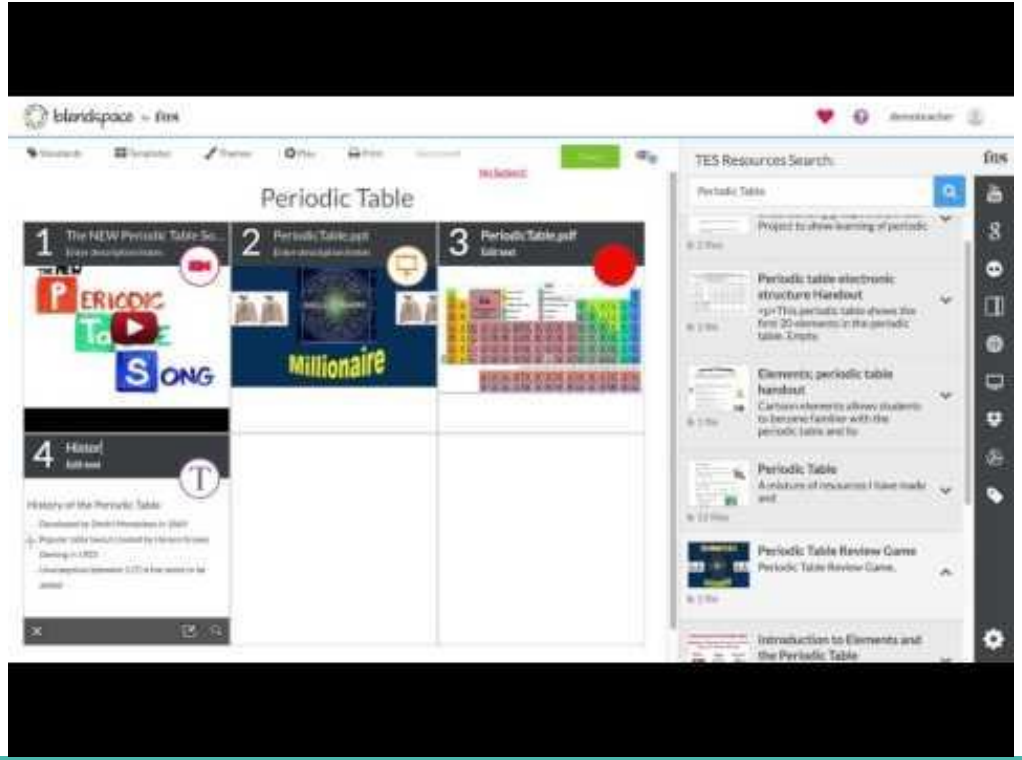


- ★ **When you have found a lesson you want to use this month, type the name of the lesson in the chat box.**

BlendSpace: it's so easy (even students can do it!)

https://youtu.be/m3SIsMKbVG8

You might get to the point where your students create their own BlendSpace lessons. I had my students do this at the end of the year for their final research projects. Each student taught their lesson to the class.



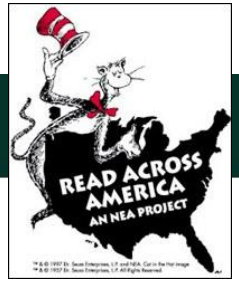
Weebly: for teachers AND students!

- For Teachers:
  - Classroom website
  - Newsletters
  - Spelling words
  - Pics
  - Blog

Some Examples (for teachers)

PROFESSIONAL DEVELOPMENT

HOME | ENGLISH LANGUAGE ARTS | MATH | SCIENCE | ENGINEERING | CLASSROOM MANAGEMENT | ED TECH | MORE PD



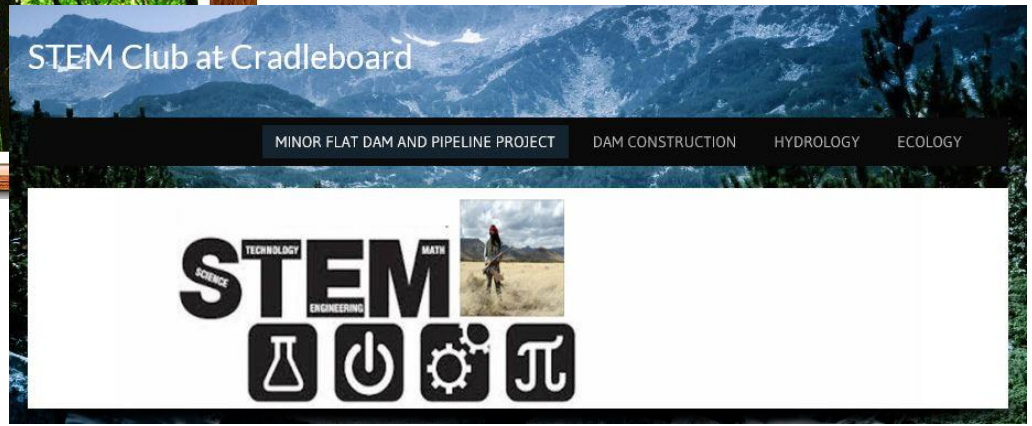
Home | Kinder-2nd | 3rd-5th | Junior High | High School | RAA Resources

Navajo County ESA is excited to offer this website with one-touch access to Read Across America resources. The resources are designed to be used in conjunction with the books Navajo County ESA presented to school libraries across the county.

Some Examples (by students)

Literature Circles or Reading Groups

After-school clubs



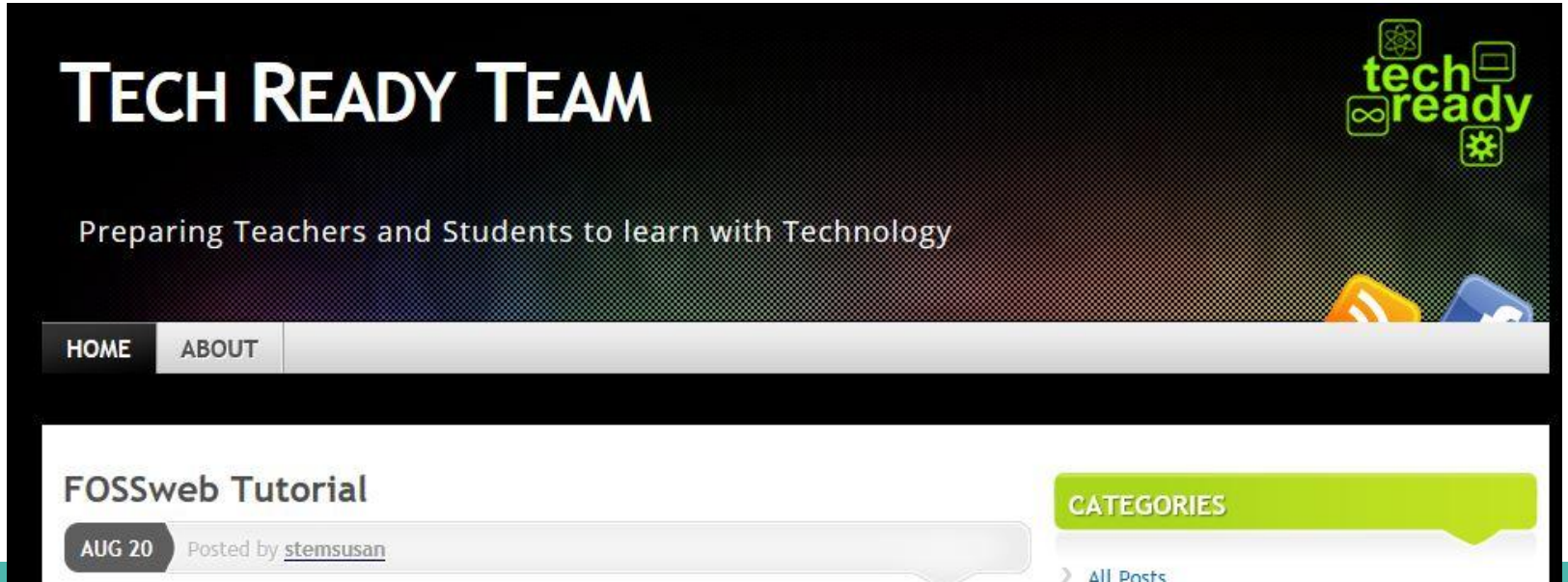
Weebly: What's Out There Already?

- What are your favorite novels/books to read with your class?
- Do an Internet search for the book title and the word "weebly"

★ **When you have found a site you might want to use this year, paste the URL of the site in the chat box.**

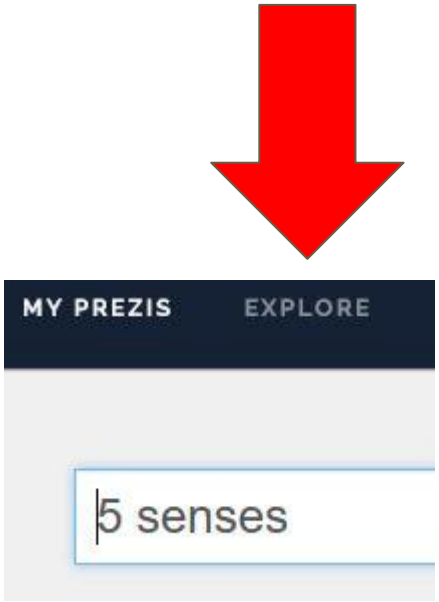
WordPress

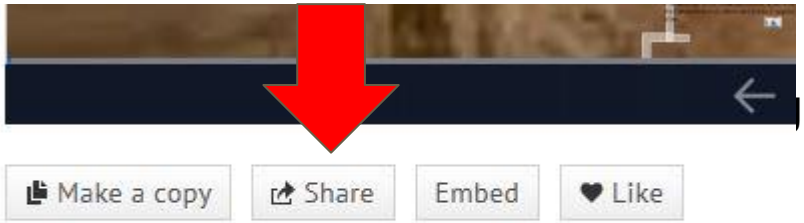
- Great for blogs (both teacher and student)
- Newsletters



Prezi: What's Out There Already?

http://prezi.com/vkjr_skyjtck/?utm_campaign=share&utm_medium=copy&rc=ex0share



- What is your STEM unit?
- Click "explore" at the top of Prezi.com and search for your
- 

ht want to use, click the chat box.

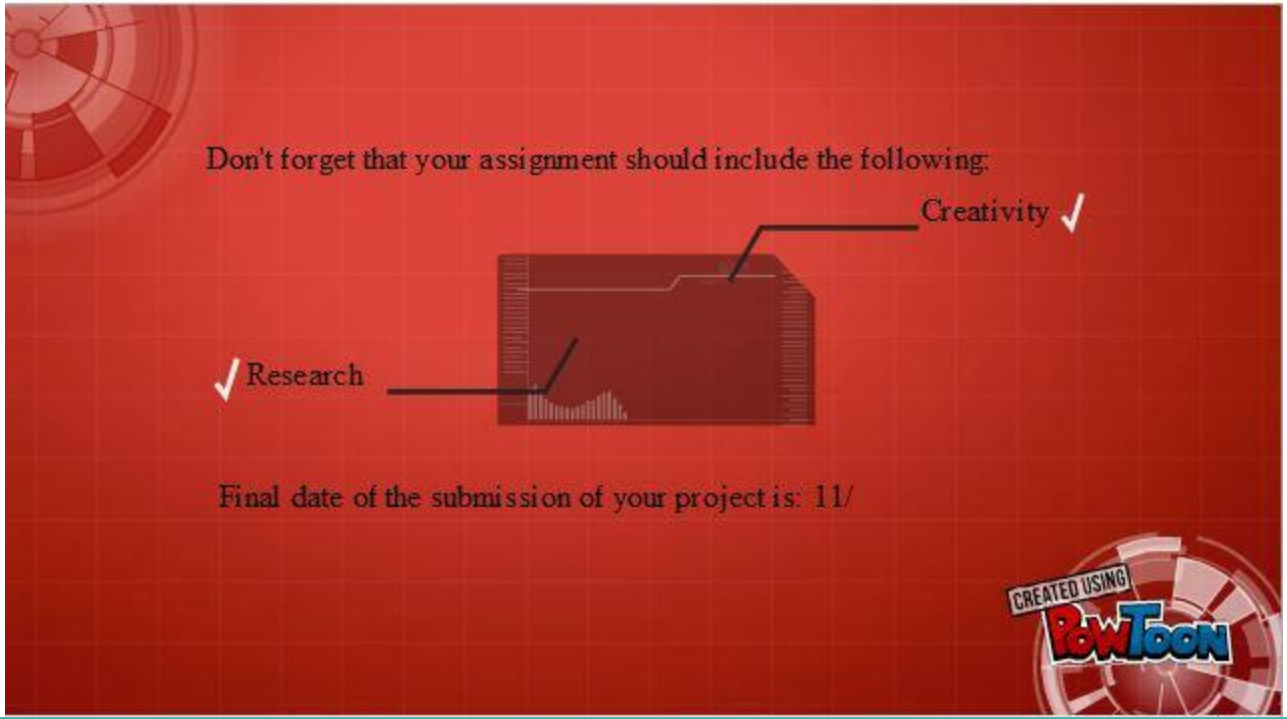
Prezi: again, for teachers AND students!

https://youtu.be/fmgF-dLXv58

Prezi

PowToon: for teachers (edu)

https://www.powtoon.com/online-presentation/fYgeHRipiq6/?mode=movie#/



Students can do it too!

POWTOON | Brings Awesomeness to Your Presentations

Hi Susan, let's choose a look for your Powtoon

PROFESSIONAL

WHITEBOARD

INFOGRAPHIC

CARTOON

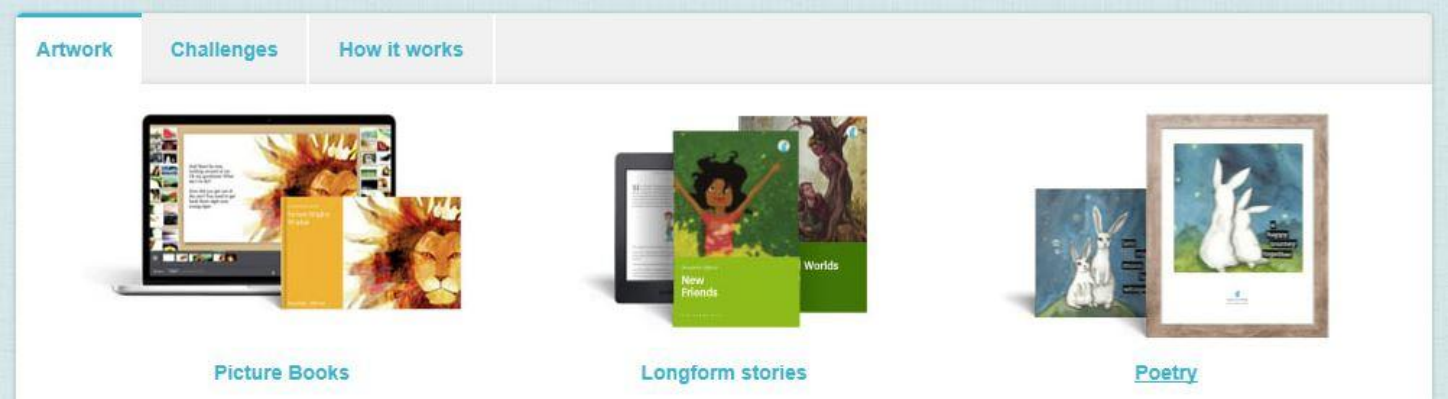
CORPORATE

StoryBird:

https://storybird.com/books/snow-snow-snow-1-2/

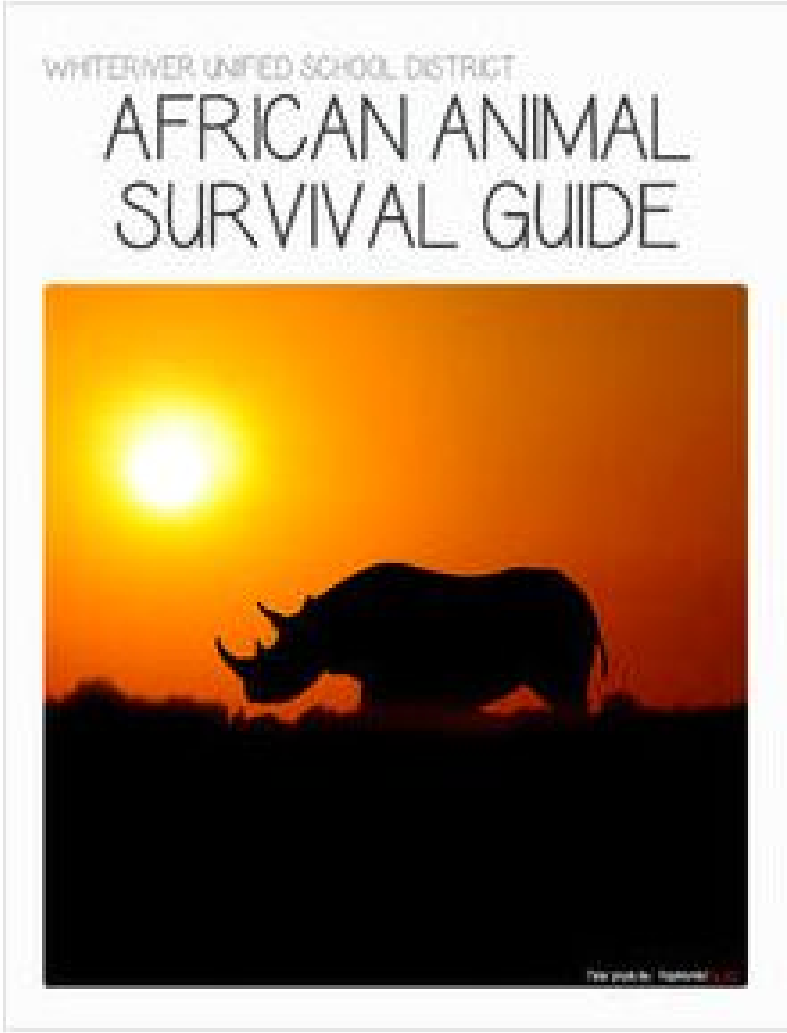
StoryBird for Students

- Go to StoryBird.com
- Click “Create” at the top
- Search for an image you might use in the month of December
- Let’s take 3 minutes
- Share in the chat box



iBooks (mac)

Easier than you might think



Voice and Choice

In a study of more than 1,000 people, those who focus on their strengths are

- 6x more likely to be engaged and
- 3x more likely to report an excellent quality of life.

For those who said they did not focus on their strengths,

- NOT ONE person reported being engaged at work!

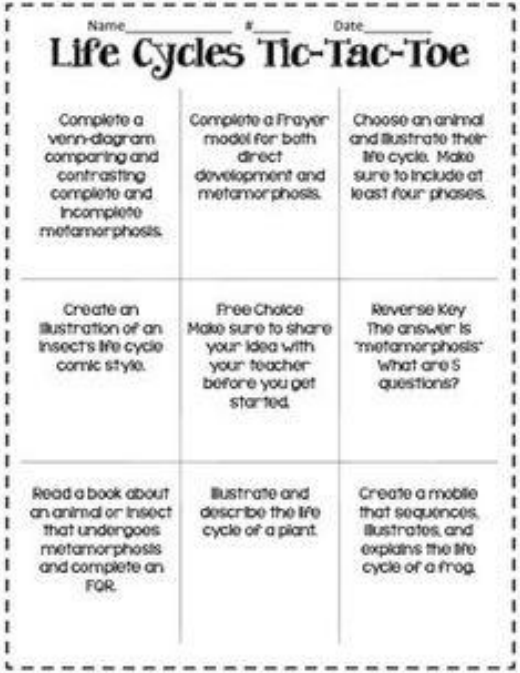
Voice and Choice

Menu (must equal 10 points)

Tic-Tac-Toe

*Remember: Don’t reinvent the wheel

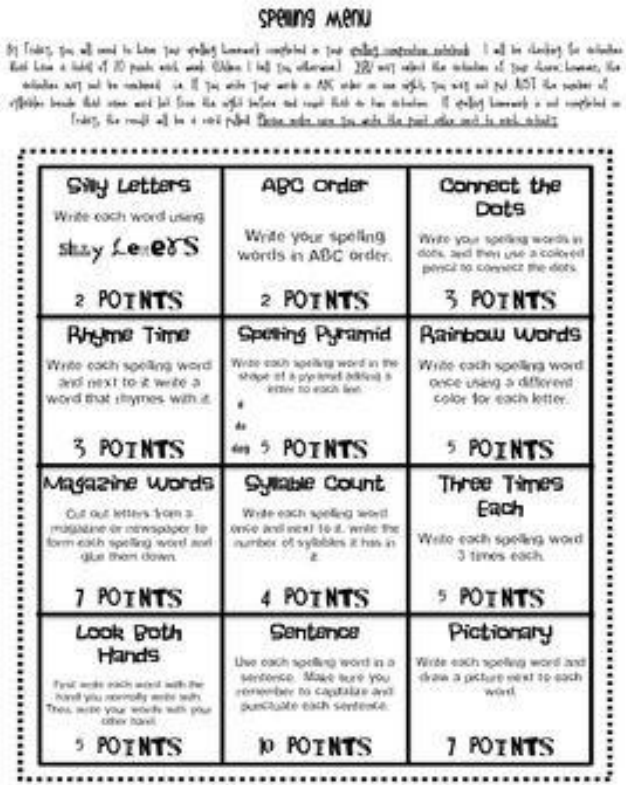
- ➢ Teacher Pay Teachers
- ➢ Pinterest



Name_____ #____ Date_____

Life Cycles Tic-Tac-Toe

Complete a venn-diagram comparing and contrasting complete and incomplete metamorphosis.	Complete a Frayer model for both direct development and metamorphosis.	Choose an animal and illustrate their life cycle. Make sure to include at least four phases.
Create an illustration of an insect's life cycle comic style.	Free Choice Make sure to share your idea with your teacher before you get started.	Reverse Key The answer is "metamorphosis" What are 5 questions?
Read a book about an animal or insect that undergoes metamorphosis and complete an FQR.	Illustrate and describe the life cycle of a plant.	Create a mobile that sequences, illustrates, and explains the life cycle of a frog.



Spelling Menu

Silly Letters Write each word using silly LeTeRS. 2 POINTS	**ABC Order** Write your spelling words in ABC order. 2 POINTS	**Connect the Dots** Write your spelling words in dots, and then use a colored pencil to connect the dots. 3 POINTS
Rhyme Time Write each spelling word and next to it write a word that rhymes with it. 3 POINTS	**Spelling Pyramid** Write each spelling word in the shape of a pyramid adding a letter to each line. 5 POINTS	**Rainbow Words** Write each spelling word once using a different color for each letter. 5 POINTS
Magazine Words Cut out letters from a magazine or newspaper to form each spelling word and glue them down. 7 POINTS	**Syllable Count** Write each spelling word once and next to it, write the number of syllables it has in it. 4 POINTS	**Three Times Each** Write each spelling word 3 times each. 5 POINTS
Look Both Hands First write each word with the hand you normally write with. Then, write your words with your other hand. 5 POINTS	**Sentence** Use each spelling word in a sentence. Make sure you remember to capitalize and punctuate each sentence. 10 POINTS	**Pictionary** Write each spelling word and draw a picture next to each word. 7 POINTS

Voice and Choice: some examples

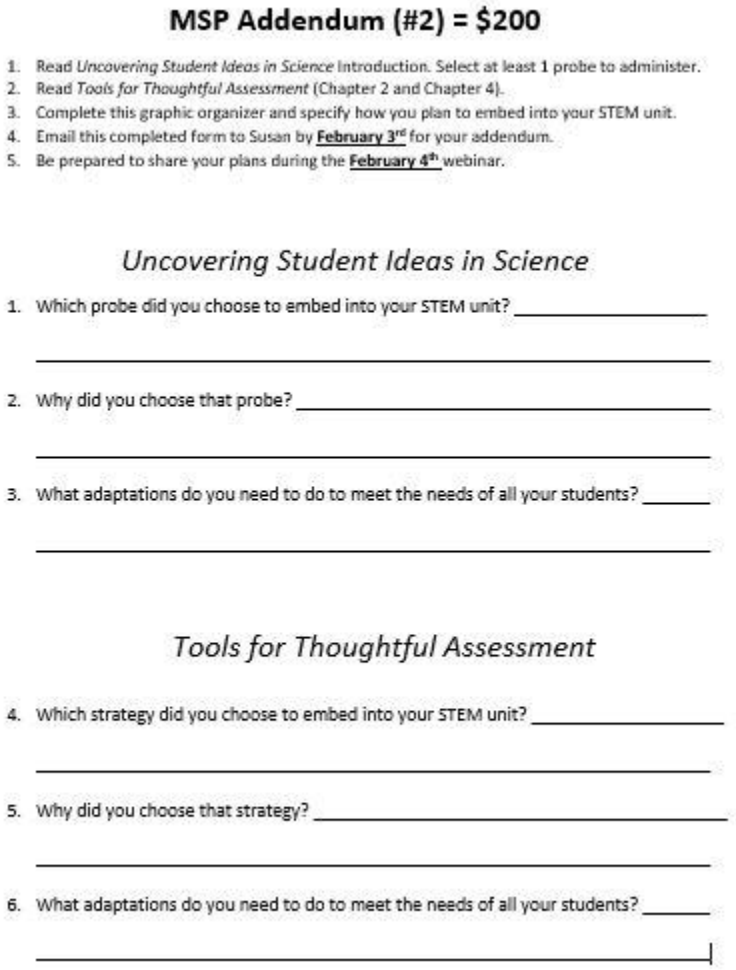
- Write song/poem
- Blog or create website
- Film a video
- Make a poster/artwork
- Engineer a solution
- Free choice (**MUST** get teacher approval first)

Addendum

Share your examples from Classroom Management that Works

Addendum #2

- ❑ An additional $200
- ❑ Blank form in Google Drive: December
- ❑ Email to Susan by February 3rd
- ❑ Please name it with your name
- ❑ I will be delivering books next week
  - ❑ BTW, any of you coming to the Code.org workshop on December 8th in the Frontier Room? Cost: FREE Link to register: https://studio.code.org/pd/workshops/1139/enroll



MSP Addendum (#2) = $200

1. Read *Uncovering Student Ideas in Science* Introduction. Select at least 1 probe to administer.
2. Read *Tools for Thoughtful Assessment* (Chapter 2 and Chapter 4).
3. Complete this graphic organizer and specify how you plan to embed into your STEM unit.
4. Email this completed form to Susan by **February 3rd** for your addendum.
5. Be prepared to share your plans during the **February 4th** webinar.

Uncovering Student Ideas in Science

1. Which probe did you choose to embed into your STEM unit? _____
2. Why did you choose that probe? _____
3. What adaptations do you need to do to meet the needs of all your students? _____

Tools for Thoughtful Assessment

4. Which strategy did you choose to embed into your STEM unit? _____
5. Why did you choose that strategy? _____
6. What adaptations do you need to do to meet the needs of all your students? _____