HOW PROBLEM/PROJECT BASED LEARNING AND STEAM CAN CHANGE EVERYTHING
**PBL + STEAM CLASSROOM**

- Interdisciplinary units
- Students designing and building prototypes
- Collaboratively solving real world problems
- Learning goes beyond the walls of the classroom
- Student Driven

Chantell Mason
@TechieTcher
I think her class is cool because she would like something like we are making a filtration device and we will brainstorm then build it.
WHAT DO THE STUDENTS THINK?

OUR YOUTUBE CHANNEL

OUR CLASS TWITTER

OUR PODCAST CHANNEL

Chantell Mason
@TechieTcher
PODCASTING

- CURRENT EVENTS
- BOOK REVIEWS
- STUDENT WRITTEN STORIES
- SCIENCE LAB RESULTS
- CLASSROOM OR SCHOOL NEWS
- INTERVIEWS
- RESEARCH ABOUT OTHER COUNTRIES
- ANYTHING STUDENTS HAVE THOUGHTS OR AN OPINION ABOUT

Our Podcast Channel

Chantell Mason
@TechieTcher
PBL END PRODUCTS

Must Haves
- Project must answer a driving question
- Made by students
- Made for an audience
- Goes beyond walls of the classroom
- Open ended so there aren’t 30 of the same end result

Ideas
- Build a prototype to solve a problem
- Publish a piece of media to inform the public of something
- Work with outside groups to mentor students
- Podcast about research
- Blog about project progress
- Performance

PBL + STEAM Resources

Chantell Mason
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Zakiya's Lead in Water Podcast

How do we inform people of the inequitable access to clean water across the globe?

What can we do to increase the number of people who can access clean water across the globe?

1. What problem(s) do you want to solve?
   - They need to stop lead poisoning from happening
   - Have to use water bottles in the schools
   - Lead getting into the water fountains to filter it.
   - Water fragments from the super old school when lead was allowed in schools

Next Steps:
1. Research about all the things that can get in the water and hurt you. (dirty water, before it's filtered)
2. Make models of the pipelines and how lead and oil gets in the pipes.
3. Tweet what we have done so far.
4. Find out how to stop the lead and oil from the pipelines.
5. Use a model to find out how lead and oil get in the pipes.
6. Tweet out so other people can see what we are done with.

Chantell Mason
@TechieTcher
Dakota Access Pipeline

Chantell Mason
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Summary
Along the Cannonball River in North Dakota, a long time ago, Native Americans lived and built homes here. Now, Native Americans from different tribes are living there again. They sleep in tepees and tents. They have come from all over the United States. They are gathering to protest the Dakota Access pipeline. The pipeline will be 1,100 miles long and cost about 3.7 billion, and the pipeline is only half finished. Sheriff Kyle Kirchmeier stopped construction because he said the protesters were causing a safety problem. About 30 protesters have been arrested so far. The Native Americans wanted to stop the pipeline because it can hurt their ancient places. Also, farmers are upset, because they think the pipeline will damage their crops.

*I think that the pipeline should be rerouted and the companies building it should create a fundraiser to raise money to help reroute the pipeline.
Any questions?

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