



SYMPOSIUM BREAKOUT SESSION
WEDNESDAY, OCTOBER 26, 2022 | 2:00-3:30 PM ET

PCBL (Personalized, Competency-Based Learning) in a PBL (Project-Based Learning) Classroom

PRESENTERS:

- JoAnn Groh, City Center for Collaborative Learning
- Tadeo Pfister, Paulo Freire Freedom School



CITY

CENTER FOR
COLLABORATIVE
LEARNING



PAULO FREIRE
FREEDOM SCHOOL

Workshop Agenda

1. PBL & CBL Overview
2. Weather and Climate Resiliency Project
3. Suggested Actions:
 - Student Choice & Universal Design Learning
 - Small Group Instruction/Workshop Model
 - Student Voice



1. New-ish to PCBL & PBL



Which are you?

2. Expert at PCBL, but new-ish at PBL

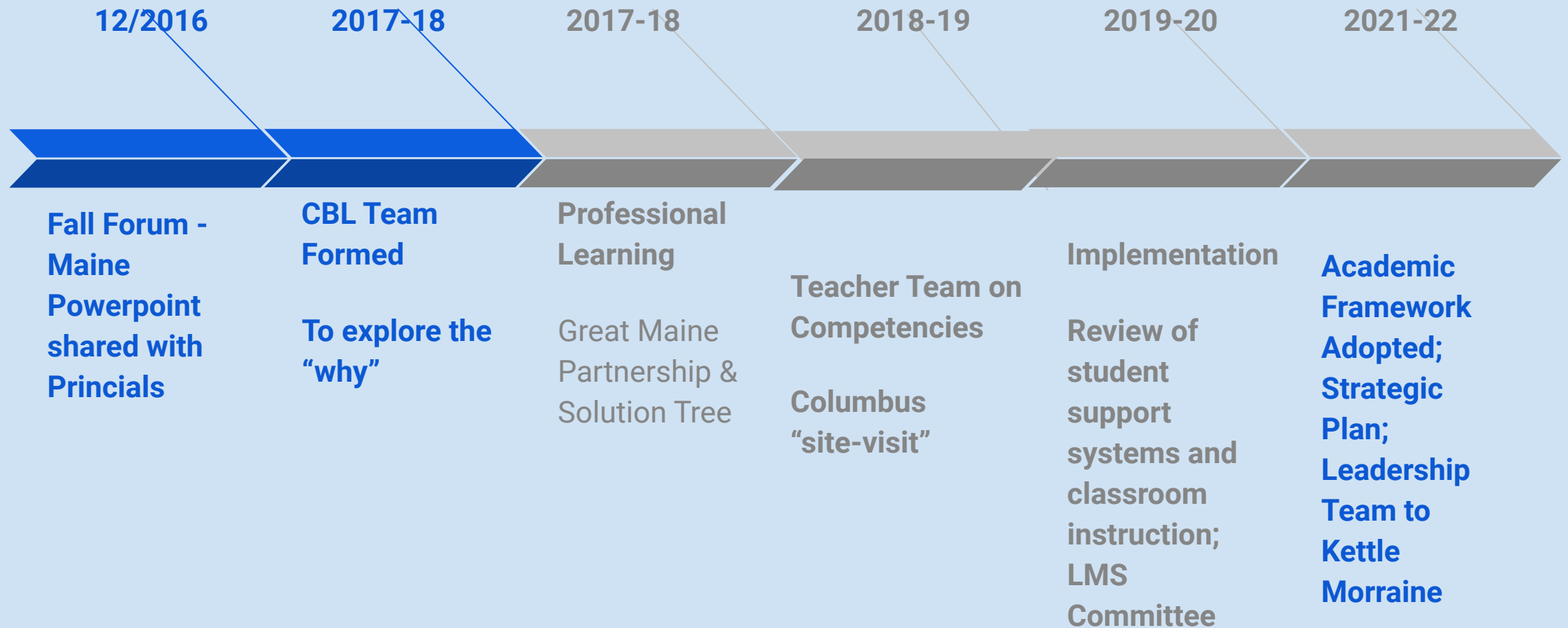


3. New-ish to PCBL, but “expert” at PBL



4. Expert at PCBL & PBL, but want to see how they fit

A Little Context and History



This Year:

- Summer Revision of Standards
- 1st year implementation of strategic plan
- Adopt a new Portrait of a Graduate
- Continue PD with Staff PFFS-D Team Teaching Model at PFFS-D
- Continue PD with Staff



The Framework for High Quality Project Based Learning



**INTELLECTUAL CHALLENGE
AND ACCOMPLISHMENT**



AUTHENTICITY



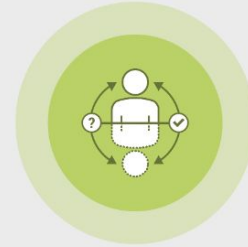
PUBLIC PRODUCT



COLLABORATION



PROJECT MANAGEMENT



REFLECTION

**Learner
Agency**

Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.

Assessment

Assessment is a meaningful, positive, and empowering learning experience for students that yields timely, relevant, actionable evidence.

**Student
Supports**

Students receive timely, differentiated support based on individual learning needs.

Mastery

Students progress based on evidence of mastery, not seat time.

**Pathways
and Pacing**

Students learn actively using different pathways and varied pacing.

Equity

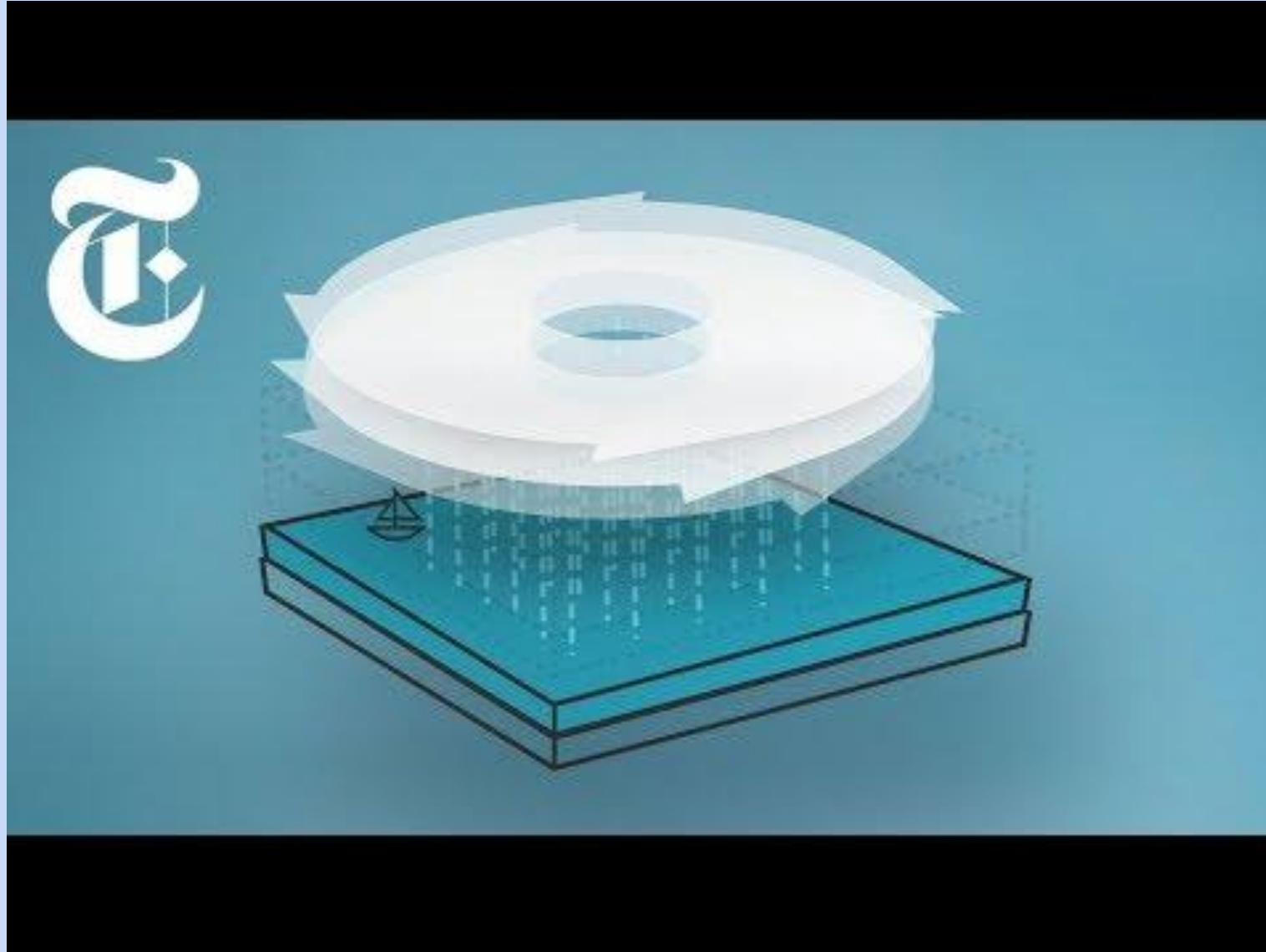
Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.

**Standards
Based**

Rigorous, common expectations for learning (knowledge, skills, and dispositions), are explicit, transparent, measurable, and transferable.

Aurora Institute, 2019

Weather & Climate Resiliency: The Problem Statement



Weather & Climate Resiliency: The Problem Statement



The Essential Question & The Learning Targets

DQ: How can we build more resilient communities that can weather the impacts of our rapidly changing climate?

The Learning Targets “Standards” in line with the Arizona Science Standards

Target

MAPS, GLOBES, AND PHOTOGRAPHS: ✖

PI 2: Maps, globes, and photographs: Interpret a variety of effective representations of the earth such as maps, globes, and photographs. SOCST.MS.GEO.P2

SCI.6.ES.PI1 ✖

Investigate and construct an explanation demonstrating that radiation from the Sun provides energy and is absorbed to warm the Earth’s surface and atmosphere. 6.E1U1.6

SCI.7.ES.PI6 ✖

Construct a model that shows the cycling of matter and flow of energy in the atmosphere, hydrosphere, and geosphere. 7.E1U1.5

SCI.7.ES.PI8 ✖

Analyze and interpret data to construct an explain for how advances in technology has improved weather prediction.7.E1U2.7


SCI.MS.SEP.PI7 ✖


PI 7: Develop and use models


Standards Based





Empower Learning: *The Playlist*


 Playlist


 Big Idea


 Activity


 Quiz

 Sub-Playlist

 Voice & Choice

 Culminating Application

 Resources



Unit 1. Weather & Climate Resiliency

7 Science

REMOVE

SHARE

ASSIGN

COPY

Show Grouping: ☐ off

314046

Big Idea

National Hurricane Center NOAA

08/08 Physics of Hurricanes

1. 8/10 Severe Weather

08/09 Severe Weather

Hurricanes Problem

Project Introduction

08/11 Monsoons

Driving Questions

08/15 Predicting the Weather

2. 8/16 Air Masses and Fronts

8/25 Drought in the West

8/27 ESRI StoryMap

8/29 Colorado River Part 1.

3. 8/31 Water in the Air

8/30 Colorado River Part 2.

5. 9/07 Characteristics of the Atmosphere

9/06 The Water Cycle

9/15 Weather vs Climate

Hurricane Fiona

4. 9/19 Forecasting the Weather

9/22 Weather Forecasting

9/21 Next Level

6. 9/26 Atmospheric Heating

Art and Science

9/26 The Jet Stream

Hurricane Ian Update

Jet Stream Part 2. & Assessment

Pakistan Floods

Global Circulation

The Ocean: A Driving Force for Weather

Finished

Pathways and Pacing

Learner Agency

Standards Based

Equity

Student Supports

Assessment

Mastery

What is the *Big Idea*?

Standards
Based

The Essential
Question drives the
exploration of the
actions needed for
change

Use Examples like
Hurricane Katrina and
Maria to expose equity
issues related to hurricane
response and
preparedness

Playlist

Big Idea

Default 6 +

Essential Question:

How can we build more resilient communities that can weather the impacts of our rapidly changing climate?

What will we learn?

We will explore what drives the earth's weather and climate. We will learn about how climate change is impacting severe weather like hurricanes. We will explore how scientists forecast severe weather. We will also explore how coastal communities of color are disproportionately impacted by climate change and hurricanes.

Equity

Why will we learn it?

The reason we are learning about weather and climate is to better prepare ourselves and our communities to be more resilient in the face of our rapidly changing climate.

Culminating Application

Assessment

Mastery

Learners will express their learning by producing an ESRI StoryMap about a historical hurricane. Learners will also be invited to participate in a science art project and produce a large format poster or a physical model about a particular hurricane.

Project Work & Assessments

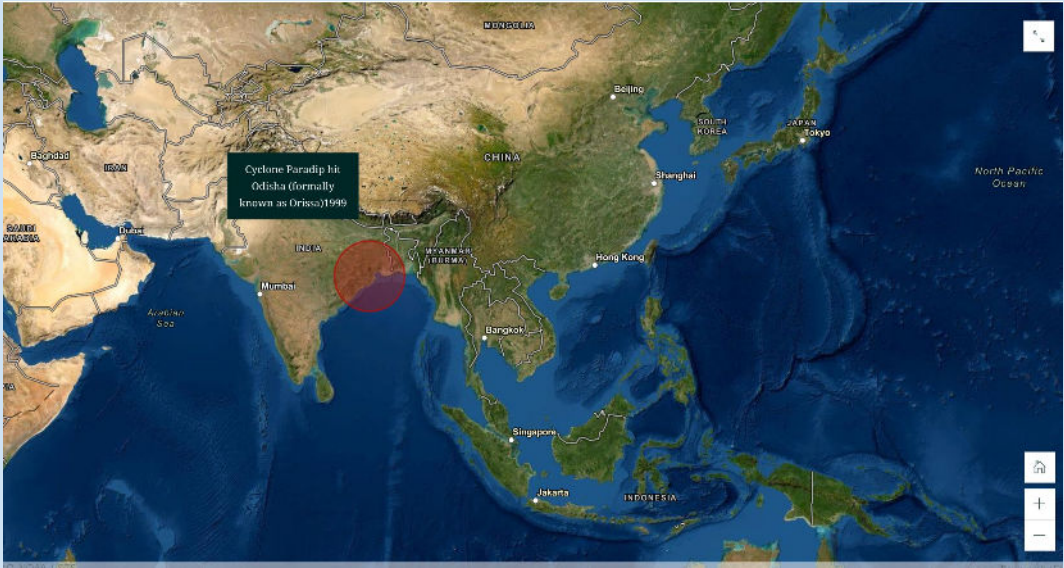
ArcGIS StoryMaps




Cyclone Paradip (Odisha) 1999

The cyclone battered Odisha's shores and left many injured and thousands more dead!

Minerva Predick-Sutoon
September 1, 2022



ArcGIS StoryMaps

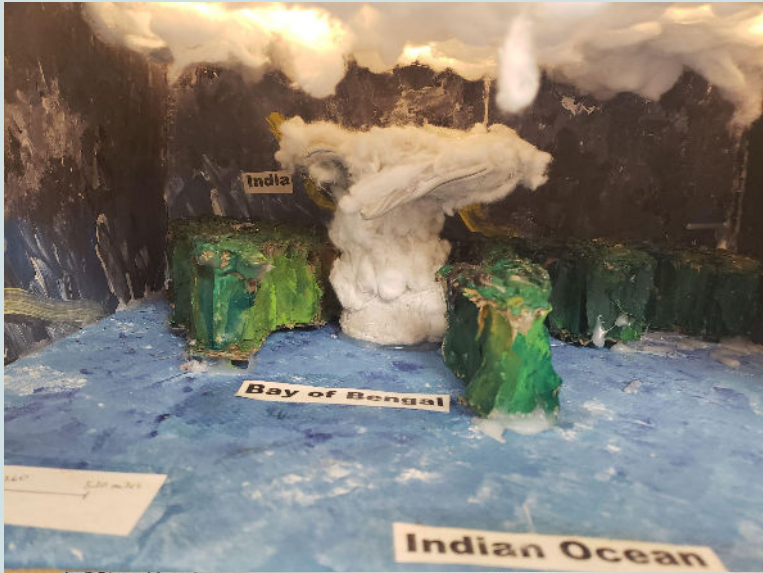
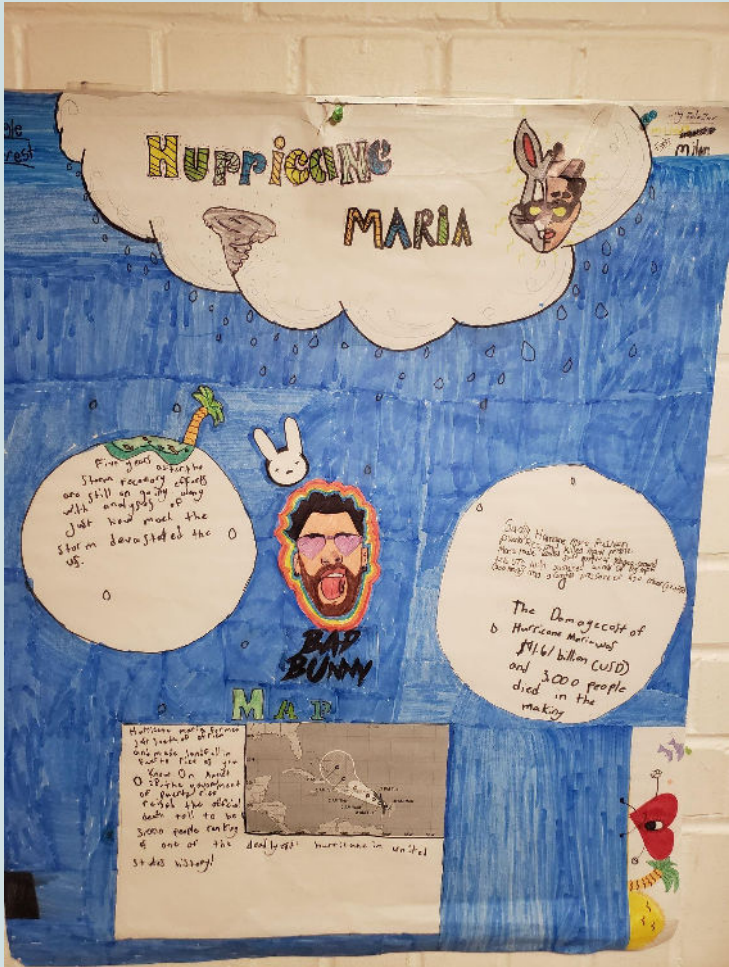
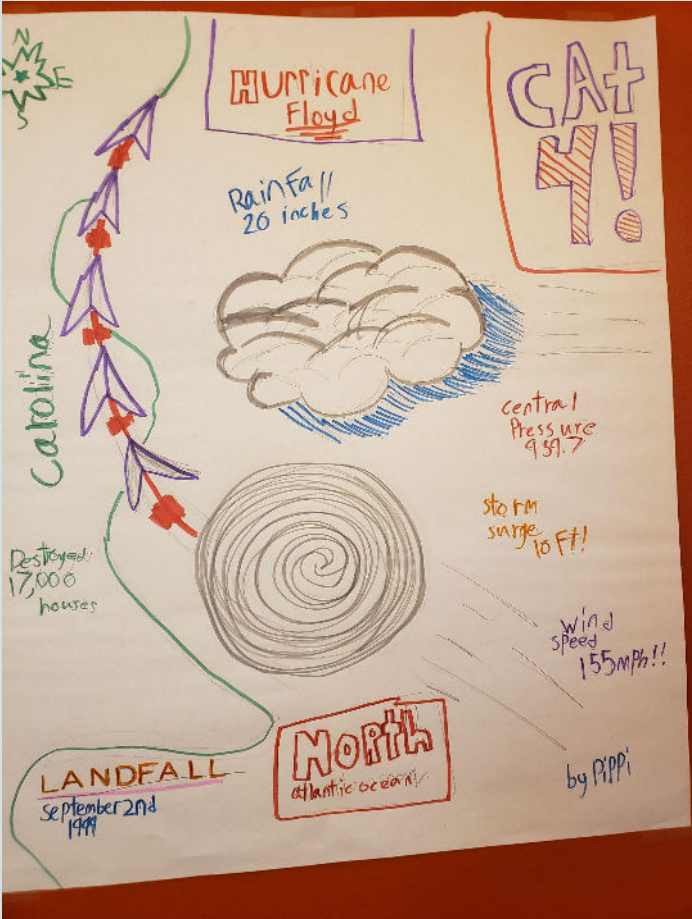


Communities were severely affected by the 1999 Paradip (Odisha) cyclone. The death toll at 10,000 was so high that bodies had to be "bulldozed into vast, faceless graves", according to an India Today report from 1999! Many lakh houses were destroyed, along with lakh animals, & people! Many people were left homeless and many children were left orphans. Odisha also lost 2 million rice crops. And according to the state forest department around 20,000 trees were uprooted in about 25,000 ha reserved forest.

Mastery

Assessment

Project Work & Assessments



To Summarize

What we are doing. . . .

- Embedding CBL into PBL units
- Providing students with lots of choice
- Moved from assessment to gathering evidence of proficiency

What is still a work in progress . . .

- Adopt a Portrait of a Graduate (incorporating our Habits of Heart and Mind) and build competencies for those
- Mastery Transcript Consortium
- Shift to more learner agency over progress on competencies

**Discuss in
Break Out
Rooms:
What did
you notice?
What are
you
wondering
about?**



Project Based Learning and Personalized Competency Based Learning

Next Steps:

Level One: Student Choice; Universal Design Learning

Level Two: Workshop Model and Small Group Instruction

Level Three: Student Voice: Co-designing

Level One: Student Choice and Universal Design Learning



Voice and Choice

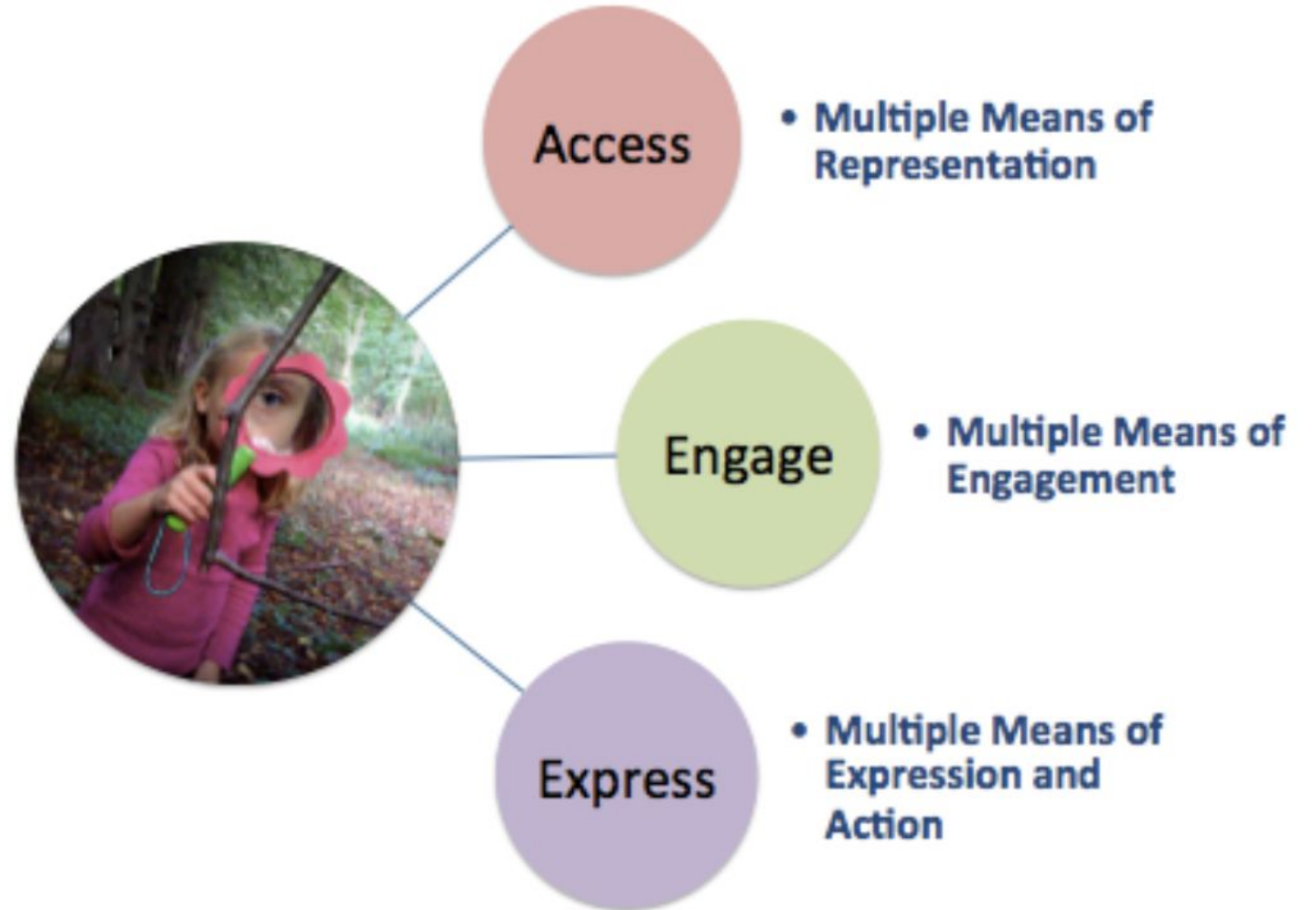
Choice: Students are encouraged to choose from a set of options provided for them, the path or process that works best for them.



Voice: Students are responsible for or included in designing their learning options



Universal Design Learning



Assessments

For 2 Main Reasons:

- 1) Data to help teacher plan instruction/support**
 - 2) Evidence of student mastery**
- Quizzes & Tests +
 - Performance tasks
 - Interviews/confers
 - Peer/self assessments
 - In-class assignments



Level Two: Small Group Instruction/Workshop Model



Just as **PBL** provides an organizational structure for a **unit of study**, the **workshop model** provides an organizational structure for a daily **lesson** within a project.



The classroom features an appropriate mixture of individual and team work time with group and small group instruction

Manage Activities

Manage Activities	<ul style="list-style-type: none">▶ The classroom features some individual and team work time and small group instruction, but too much time is given to whole group instruction.▶ Classroom routines and norms for project work time are not clearly established; time is not used productively.▶ Schedules, checkpoints, and deadlines are set, but they are loosely followed or unrealistic; bottlenecks impede workflow.▶ Teams are formed using either a random process (e.g., counting off) or students are allowed to form their own teams with no formal criteria or process.	<ul style="list-style-type: none">▶ The classroom features individual and team work time, whole group and small group instruction, but these structures are not well-balanced throughout the project.▶ Classroom routines and norms are established for project work time, but are not consistently followed; productivity is variable.▶ Realistic schedules, checkpoints, and deadlines are set, but more flexibility is needed; bottlenecks sometimes occur.▶ Generally well-balanced teams are formed, but without considering the specific nature of the project; students have too much voice and choice in the process, or not enough.	<ul style="list-style-type: none">▶ The classroom features an appropriate mixture of individual and team work time, whole group and small group instruction.▶ Classroom routines and norms are consistently followed during project work time to maximize productivity.▶ Project management tools (group calendar, contract, learning log, etc.) are used to support student self-management and independence.▶ Realistic schedules, checkpoints, and deadlines are set but flexible; no bottlenecks impede workflow.▶ Well-balanced teams are formed according to the nature of the project and student needs, with appropriate student voice and choice.
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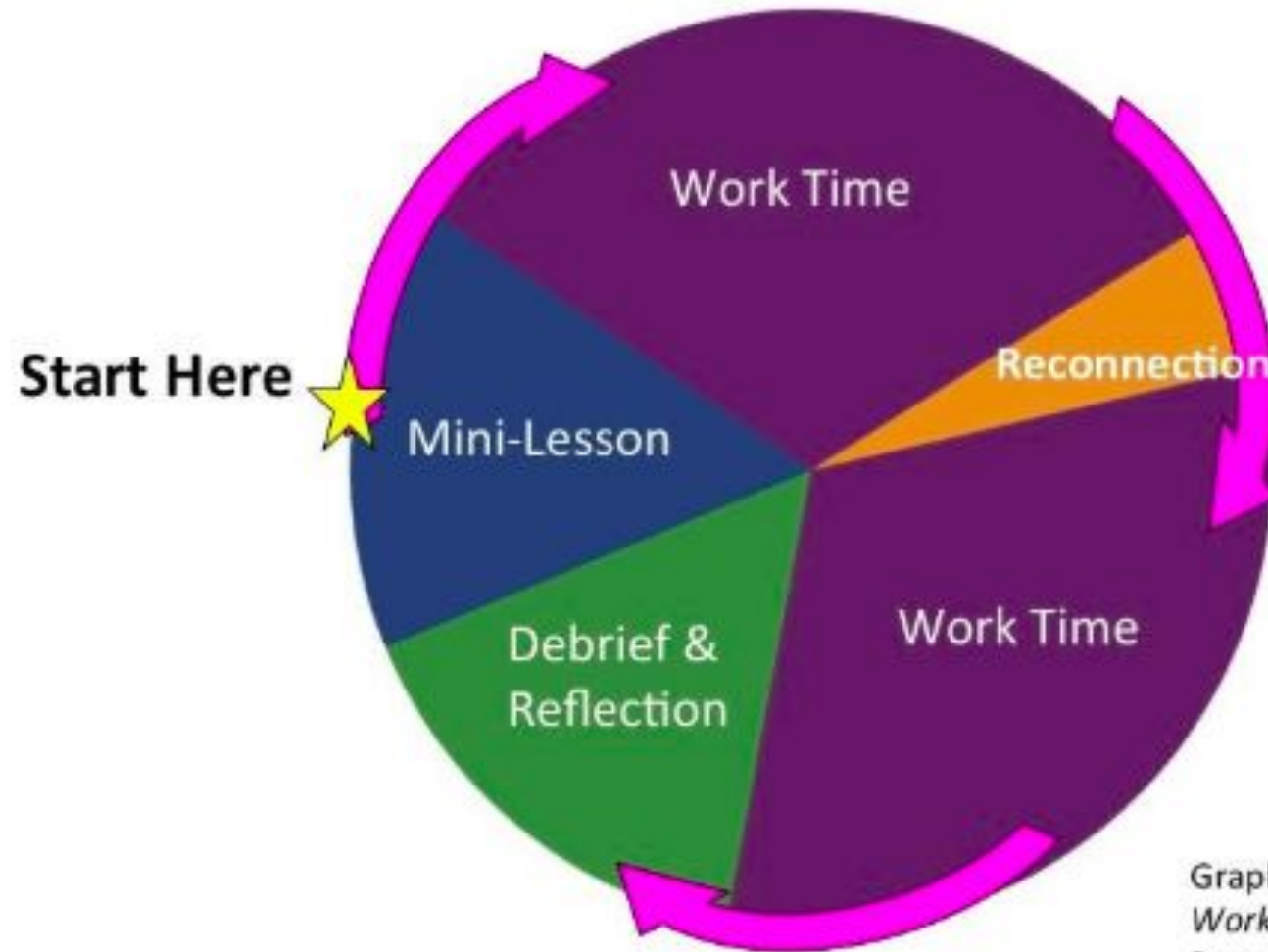
Classroom routines and norms are consistently followed during project work time to maximize productivity (Standard Operating Procedures - SOPs)

THINGS THAT MAY NEED TO HAPPEN IN THE MIDDLE OF A PROJECT

- Content instruction
- Skills instruction
- Reflection
- Formative assessment
- Project team work
- Revisiting need to know questions
- Individual coaching
- Communication with experts
- Peer critique
- Guided practice
- Independent practice
- Process reflection
- Rubric analysis
- Literacy tasks
- Remediation
- Small group support
- Whole-class discussions
- Journaling
- Goal-setting
- Collaboration feedback
- Conflict resolution
- Labs
- Lectures
- Review
- Revision time
- Gallery walks
- Guest speakers
- Field trips



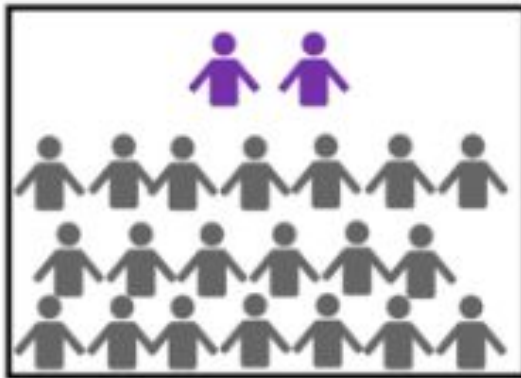
The Workshop Structure



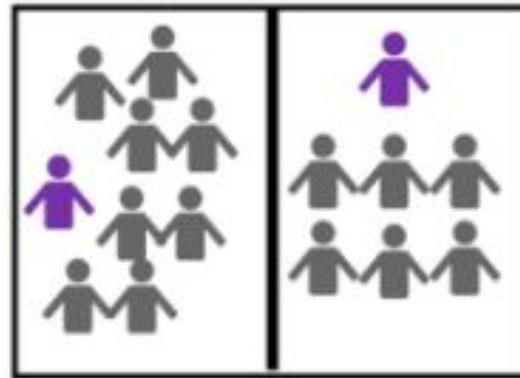
Graphic adapted from *That Workshop Book*, by Samantha Bennett

LEARNING ORGANIZATION MODALITIES FOR TEAM TEACHING IN PROJECT-BASED LEARNING

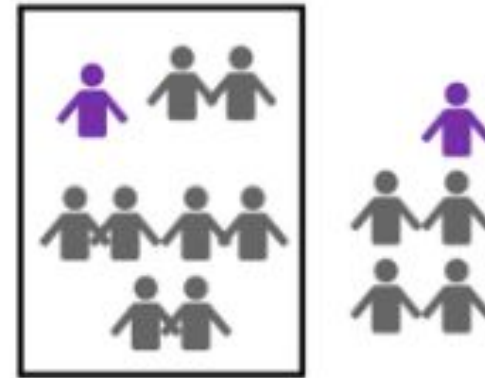
WHOLE CLASS



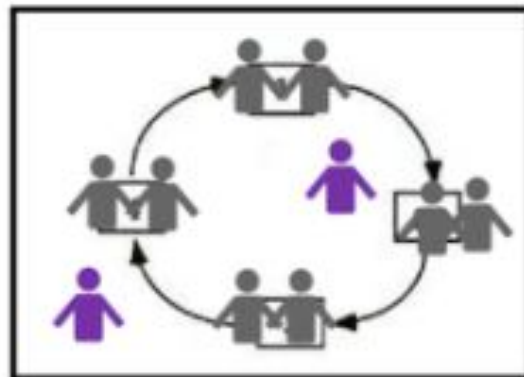
SPLIT GROUP



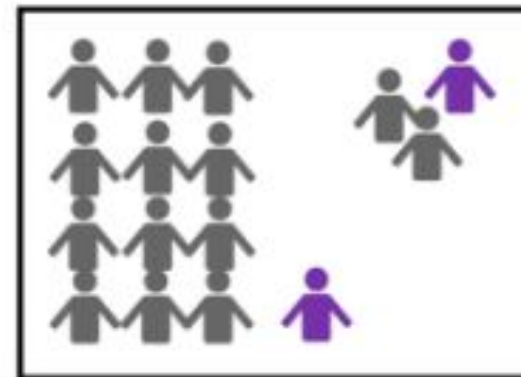
BREAKOUT WORKSHOP



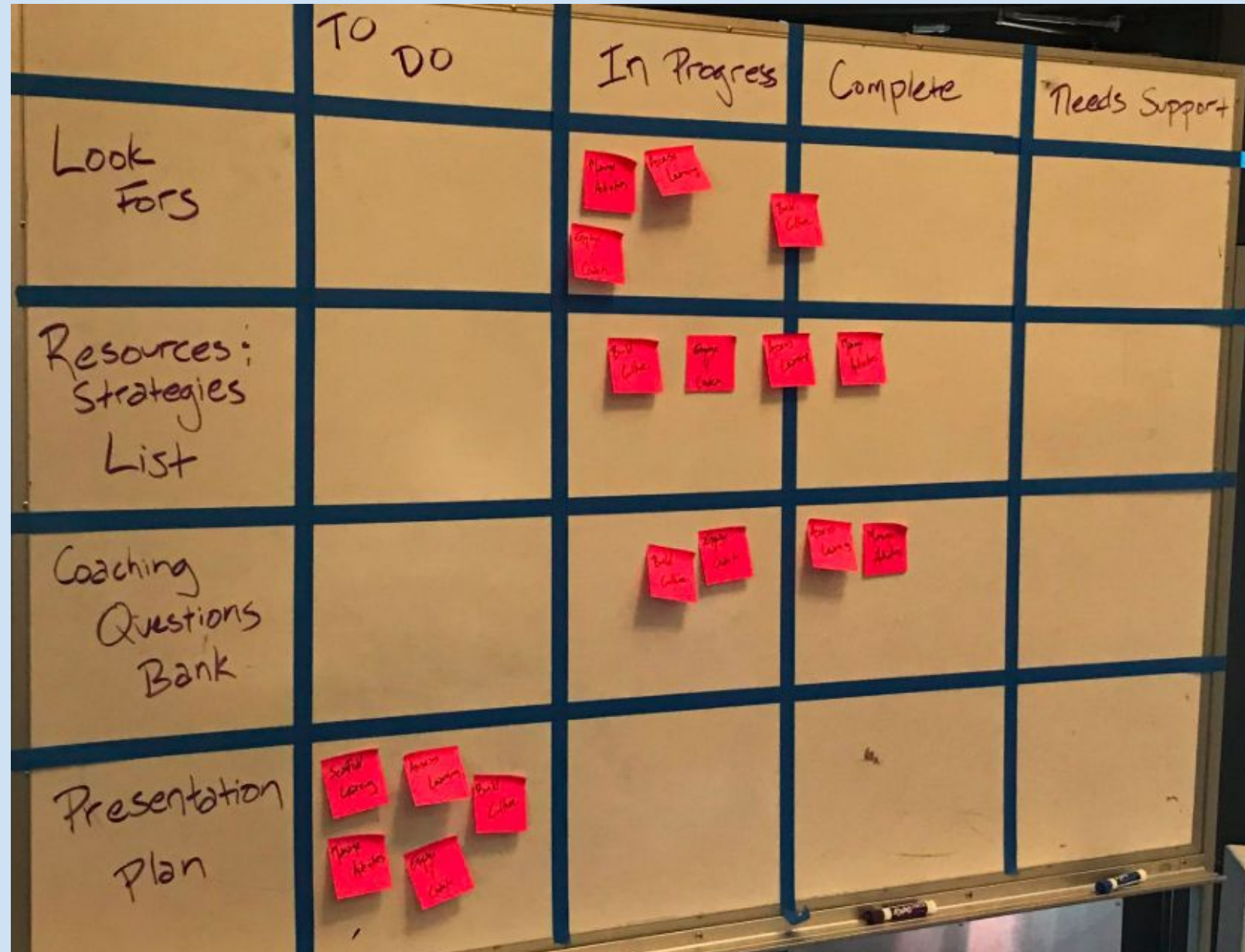
STATIONS



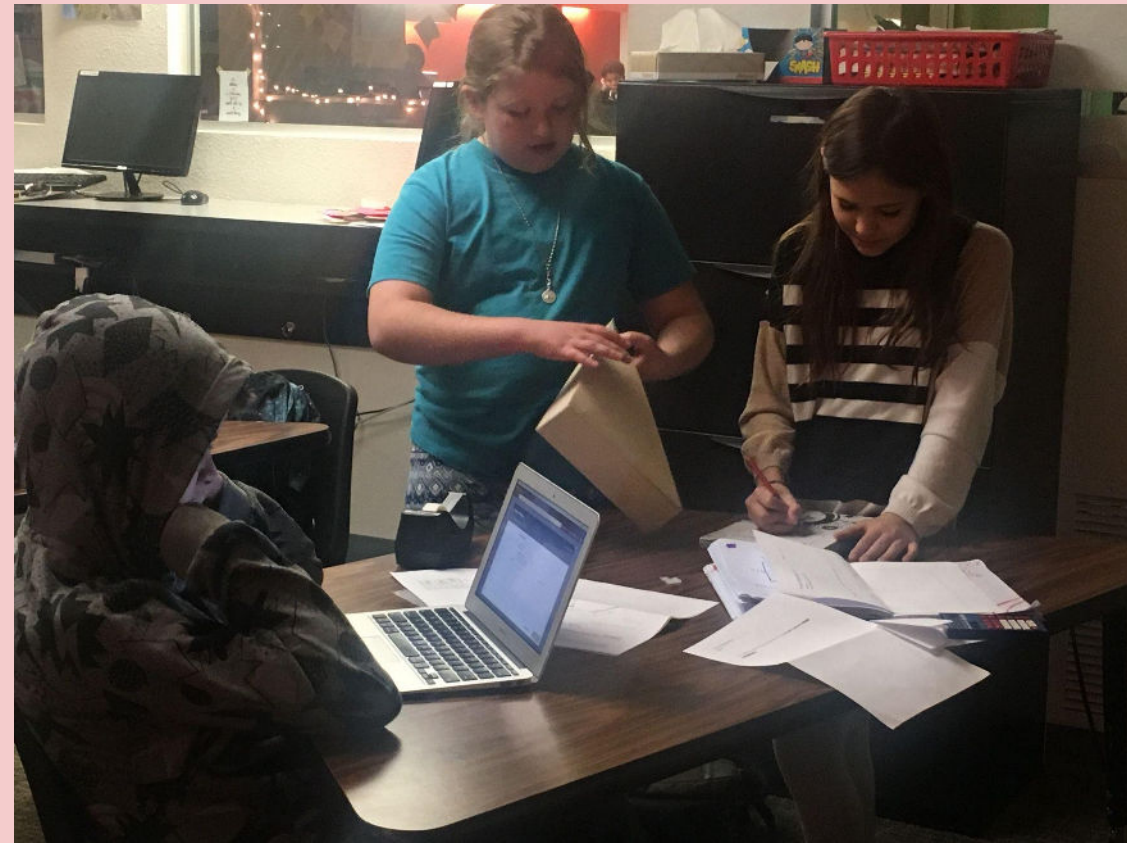
CONFERENCING



A student wearing headphones and a cap sits at a desk, writing in a notebook. A laptop is open next to him. In the background, a classroom is visible with bookshelves, an American flag, and other students working at tables.



Level Three: Student Voice



**What if students were empowered to embellish learning
with learning about competencies they still need to master?**

PFFS Intercession

Kettle Moraine Seminar



For More Information:

BUCK INSTITUTE FOR EDUCATION

PBLworks

CITY CENTER FOR
COLLABORATIVE
LEARNING

KnowledgeWorks

 **PAULO FREIRE**
FREEDOM SCHOOL



Learning Without Boundaries

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Symposium

OCTOBER 24 – 26, 2022 | VIRTUAL

Thank you for joining us!

Share Your Thoughts

Participate in our one-minute poll (link in chat box)

