



# Project-Based Learning in Action

# OBJECTIVES



- Define project-based learning
- Review the three phases of PBL
- Develop knowledge necessary to implement PBL into your program



# GREAT PROJECTS...



Think of a project from your youth...

- What was it?
- How did it come about?
- Who guided you?
- What made it good?



# WHY PROJECT-BASED LEARNING?



- Apply concepts and learning to real-world situations and activities
- Develop 21<sup>st</sup> century skills
- Engage all children and youth
- Develop skills, competence, and confidence



# PROJECT PHASES AND TECHNIQUES

## Phase 1: Introduce and Prepare

- Step 1: Capture Student Voice and Choice
- Step 2: Introduce the Topic
- Step 3: Map Knowledge and Wonders
- Step 4: Choose an Inquiry Direction
- Step 5: Help Students Make Connections to Real Life
- Step 6: Craft a Driving Question

## Phase 2: Design and Implement

- Step 7: Develop a Project Idea
- Step 8: Assign Roles and Group Students
- Step 9: Create a Plan of Action
- Step 10: Determine Tasks and Timeline
- Step 11: Gather Tools and Resources
- Step 12: Facilitate the Plan

## Phase 3: Celebrate, Reflect and Assess

- Step 13: Celebrate With a Culminating Event
- Step 14: Document the Learning
- Step 15: Reflect and Assess



# NEEDS ASSESSMENT



## Student Interest



- Student surveys
- Polls
- Conversations
- Brainstorming sessions
- Focus groups



## Targeted Skills (Student Needs)



- Survey of student needs
- Academic reports
- Observation



Topic

# NEEDS ASSESSMENT

## DEVELOPING A TOPIC



### Student Voice



- **Students want to learn about recycling**



### Targeted Skills (Student Needs)



- **Persuasive writing and speaking**
- **Technology as a skill**



### Topic



- **Recycling: Discovering the recycling efforts in our community and how we can promote them.**

# DRIVING QUESTION



Your question must meet the following criteria:

- ✓ Open-ended
- ✓ Relevant to the real-world
- ✓ Challenges students to use higher-order thinking skills
- ✓ Connected to youths' lives
- ✓ Potential for actionable solutions





# DRIVING QUESTION

Driving Question: Do people recycle in our community?

- ✓ Open-ended
- ✓ Relevant to the real-world
- ✓ Challenges students to use higher-order thinking skills
- ✓ Connected to youths' lives
- ✓ Potential for actionable solutions

- How would you improve this question?
- Create a driving question for your topic.

# AUTHENTIC PROJECTS



- Focus on issues that affect students.
- Start hyper-local for younger students and expand with age.
- Identify community needs.
- Encourage active investigation.



# RECYCLING PROJECT IDEAS

**Driving Question:** How can we, as environmental scientists, encourage our community to participate in our town's recycling program?

**First Project Idea:** Build a PowerPoint presentation with pictures and descriptions of the benefits of recycling.

**Second Project Idea:** Design a webpage for the town's recycling program and present a persuasive argument to garner local support of the recycling program at a local community meeting.





# TASK LIST AND TIMELINE



**Develop a task list and timeline for your project.**

**Consider and plan for:**

- Length of project, calendar, scheduling.
- Materials.
- Timeline with interim check-ins.
- Grouping students.
- Stages and phases.
- Tasks, roles and responsibilities.

# CELEBRATE

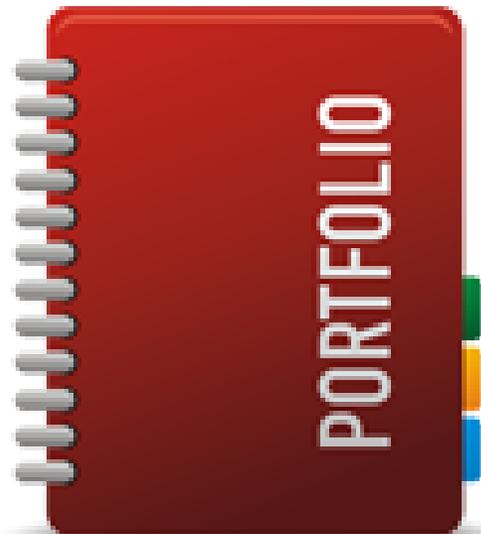
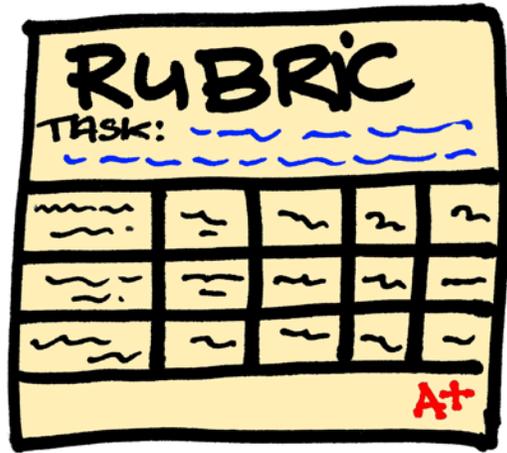
- Show learning and accomplishment
- Plan from the start
- Check against objectives

**Create a culminating event for your project!**





# REFLECT AND EVALUATE



- Artifacts: Portfolios, Journals
- Observations
- Assessments
- Rubrics

# NEXT STEPS



- How can we introduce the concept of project-based learning to youth?
- What are potential projects?
- What do you need to plan timelines and implement your projects?