OBJECTIVES

• Define project-based learning
• Review the three phases of PBL
• Develop knowledge necessary to implement PBL into your program
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 21st 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.
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: Do people recycle in our community?

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- 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.
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.
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
• 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?