

Project-Based Learning:

Learning through authentic,
engaging, and complex
investigations & problem solving

*East Rockaway Board of Education
Curriculum Presentation
December 13, 2022*

East Rockaway School District Mission Statement

The East Rockaway School District respects our diverse community and proud traditions by engaging every student in an innovative and challenging educational program which inspires learners to become self-directed, ethical, creative, and globally conscious citizens.

What
Drives
Us?

VALUES AND PRIORITIES

21st Century
Learning

Results Will
Follow

Kids First,
Always

Commitment to
Continuous
Learning

The Power of
Feedback

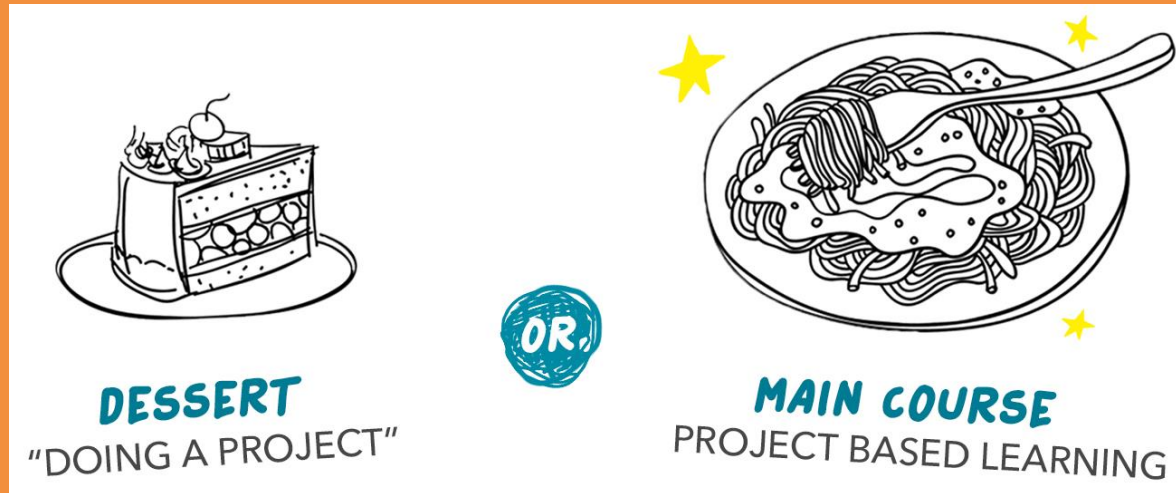
What is Project-Based Learning?

Students...

- Gain knowledge & skills working on an extended investigation
- Solve authentic problems & challenges
- Demonstrate their knowledge by developing a public product or presentation
- Build deep content knowledge
- Enhance 21st Century Skills including critical thinking, collaboration, communication, and creativity





“Doing a Project” vs. Project-Based Learning



- “Doing Projects” is the *dessert* at the end of the unit
- PBL is the *main course* and the driver of the learning

Differences Between “Dessert” and “Main Course” Projects

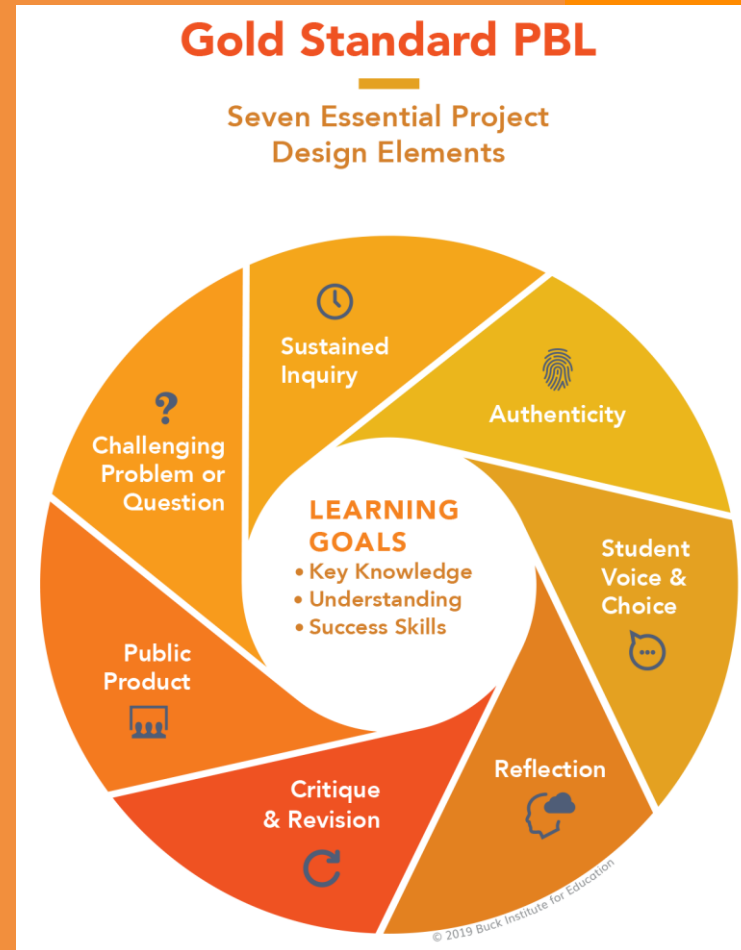


DESSERT “DOING A PROJECT”	 MAIN COURSE PROJECT BASED LEARNING 
An add-on to the traditional instruction; at the end (or alongside) of the unit	Instruction integrated into the project (The project is the unit!)
Follows direction of the teacher	Driven by student inquiry
Focused on product	Focused on product and process
Often unrelated to standards and skills	Aligned to academic standards and success skills
Can be completed alone and/or at home	Involves collaboration with students and in-class guidance from teacher
Remains within the school world	Has a real-world context and application
End result of project displayed in the classroom	Results of project shared beyond the classroom with a public audience

Gold Standard PBL

7 Essential Project Design Elements

- Research-informed model for improving, calibrating, and assessing practice
- Focus on students acquiring knowledge, understanding, & skills



Gold Standard PBL

7 Project-Based Teaching Practices

- Student-centered model of instruction
- Teacher as facilitator of learning
- Aligns with our Visible Learning practices

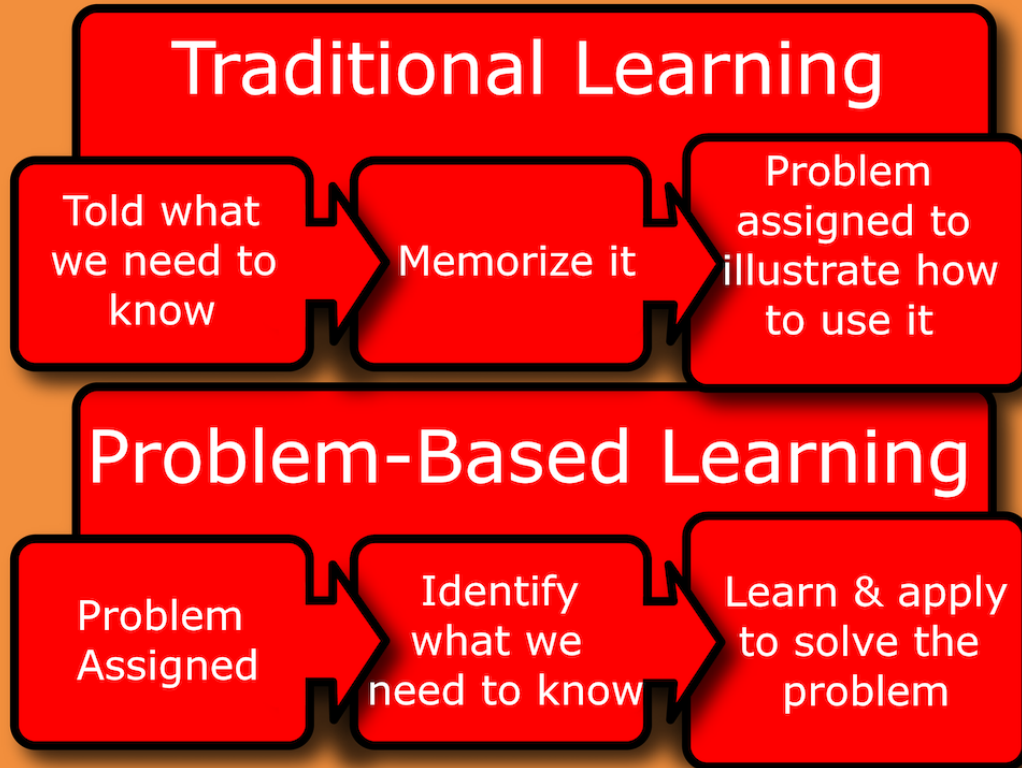


Engage & Coach

BUCK INSTITUTE FOR EDUCATION

PBLworks

Put Simply...



Connecting PBL to 21st Century Skills

Research-based benefits across 5 key areas:

- Academic achievement
- 21st Century Competencies
- Equity
- Motivation
- Teacher satisfaction



Academic Achievement

- Students learning through PBL retain content longer and have a deeper understanding of what they are learning.
(Penuel & Means, 2000; Stepien, Gallagher & Workman, 1993)
- In specific content areas, PBL has been shown to be more effective than traditional methods for teaching math, economics, language, science, and other disciplines.
(Beckett & Miller, 2006; Boaler, 2002; Finkelstein et al., 2010; Greier et al., 2008; Mergendoller, Maxwell, & Bellisimo, 2006)
- On high-stakes tests, PBL students perform as well or better than traditionally taught students.
(Parker et al., 2011)



21st Century Competencies

- Students demonstrate better problem-solving skills in PBL than in more traditional classes and are able to apply what they learn to real-life situations. (Finkelstein et al., 2010)
- When teachers are trained in PBL methods, they devote more class time to teaching 21st century skills. (Hixson, Ravitz, & Whisman, 2012)
- Through PBL experiences, students improve their ability to work collaboratively and resolve conflicts. (Beckett & Miller; ChanLin, 2008)



Equity

- PBL shows promise as a strategy for closing the achievement gap by engaging lower achieving students.
(Boaler, 2002; Penuel & Means, 2000)
- PBL can work in different types of schools, serving diverse learners.
(Hixson, Ravitz, & Whisman, 2012)

Motivation

- In PBL classrooms, students demonstrate improved attitudes toward learning. They exhibit more engagement, are more self-reliant, and have better attendance than in more traditional settings. (Thomas, 2000; Walker & Leary, 2009)

Teacher Satisfaction

- Teachers may need time and professional development to become familiar with PBL methods, but those who make this shift in classroom practice report increased job satisfaction. (Hixson, Ravitz, & Whisman, 2012; Strobel & van Barneveld, 2009)

Tying It All Together



Connecting Project-Based Learning, Visible Learning, and 21st Century Skills

The Students's Role in the VL and PBL Classroom Room Align

Take ownership of learning

- Co-develop & understand learning intentions
- Respond to external & objective success criteria
- Develop a range of learning & problem-solving strategies
- Know when they are not progressing
- Seek feedback from teacher & peers
- Visibly teach themselves





Thank you for
your attention.

Are there any
questions?