Making Project-Based Learning More Than a Project
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Poll 1: About You

Which grade level are you currently teaching, coaching or leading in your district?
Poll 1 Options

Elementary School
Middle School
High School
Post-Secondary
Poll 2: About You

What is your role in your district?
Poll 2: Options

- Teacher
- Principal
- Support Staff
- Curriculum Specialist
- Technology Specialist
The Agenda

1) What PBL is not
2) What is project-based learning (PBL)?
3) PBL design elements
4) How to design a strong PBL question
5) Advice for admins and coaches
6) Resources for authentic inquiry
7) Checklist for PBL components
Poll 3: About You

How knowledgeable do you feel you are on the topic of project-based learning?
Poll 3: Options

• I am a PBL expert
• I have a working knowledge of PBL
• I am new to PBL
Poll 4:
What is the biggest thing you hope to take away from today’s session?
Poll 4: Options

- A working knowledge of PBL
- Resources for starting PBL in my school
- A checklist of PBL components
- PBL project ideas for my classroom (can pick more than 1 option)
What is project-based learning NOT?

- It’s not teacher directed, it’s student driven
- it’s not a 1 off activity
What is project-based learning?

Project-based learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an engaging and complex question, problem, or challenge.
“Main Course PBL” vs. “Dessert Projects”

21st Century Project-Based Learning

Projects
Doing Projects Vs. Learning Through Projects
Why project-based learning?
PBL is NOT a Noun!

- We can personalize by differentiating & scaffolding for students (*Differentiation*)
- We can personalize by varying the pace for students (*Pacing*)
- We can personalize by focusing on identity, interest and agency with students (*To Know & Be Known*)
Gold Standard
Project Design
Elements
The 8 Essential Elements of Project Based Learning

- Key Knowledge & Skills
- Problem or Question
- Sustained Inquiry
- Authenticity
- Critique & Revision
- Reflection
- Student Voice
- Public Product
Key Knowledge & Skills
Problem or Question
## Driving Question or Problem

<table>
<thead>
<tr>
<th>For Students...</th>
<th>For Teachers...</th>
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<tbody>
<tr>
<td>Guides project work</td>
<td>Guides planning and reframes content standards or big ideas</td>
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<tr>
<td>Creates interest and/or the feeling of challenge</td>
<td>Captures and communicates the purpose of the project</td>
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<td>Reminds them “Why we are doing this today...”</td>
<td>Initiates and focuses inquiry</td>
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Designing A Good PBL Driving Question

An effective driving question must meet the following criteria:

● Engaging for students
● Open-ended
● Aligned with learning targets
Different Types of Driving Questions

1. A Philosophical or Debatable Issue, or an Intriguing Topic
   a. Who is a hero?
   b. When is war justified?
   c. Can DNA evidence be trusted in criminal trials?

2. Specifying a Product, Task, or Problem to be Solved
   a. How can we invent a new toy that is safe, not too expensive, and fun for four year olds?
   b. How can we design a theater of a given size so it holds the maximum number of seats?

3. Adding a Real-World Role for Students
   a. How can we, as tour guides, plan a tour to show visitors what to see and do in our city?
   b. How can we, as structural engineers, design and test bridge models for a walkway over the river?
Sustained Inquiry
# Complexity

<table>
<thead>
<tr>
<th></th>
<th>Simpler</th>
<th>More Complex</th>
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</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>10-15 contact hours</td>
<td>20+ contact hours</td>
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<tr>
<td><strong>Breadth</strong></td>
<td>One subject</td>
<td>Multiple subjects</td>
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<tr>
<td><strong>Who’s involved</strong></td>
<td>One teacher</td>
<td>Several teachers; outside experts and orgs; people in community or distant areas</td>
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<tr>
<td><strong>Where it takes place</strong></td>
<td>Classroom, school</td>
<td>On and off campus</td>
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<tr>
<td><strong>What products are being created</strong></td>
<td>One product that does not require too much time and advanced skills or tools</td>
<td>Multiple or elaborate products</td>
</tr>
<tr>
<td><strong>Student autonomy</strong></td>
<td>Teacher-defined; tightly managed</td>
<td>Co-defined and managed</td>
</tr>
<tr>
<td><strong>Technology to be used</strong></td>
<td>Fewer and familiar tech tools</td>
<td>Several tech tools that require new learning</td>
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<tr>
<td>Focus</td>
<td>Product</td>
<td></td>
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<td>-----------------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Same Product, Same Focus</td>
<td>Different Product, Same Focus</td>
<td></td>
</tr>
<tr>
<td>Presentation, Water quality in our region</td>
<td>Presentation/ photo essay, Water quality in our region</td>
<td></td>
</tr>
<tr>
<td>Same Product, Different Focus</td>
<td>Different Product, Different Focus</td>
<td></td>
</tr>
<tr>
<td>Presentation, Water quality in various parts of our region</td>
<td>Presentation/ photo essay, Water quality in various parts of our region</td>
<td></td>
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Authenticity
One way to think about Voice and Choice is having autonomy over what Dan Pink calls “The 4 Ts”

- **your task**: what work you do
- **your time**: when you do work
- **your technique**: how you do work
- **your team**: whom you work with
Reflection and Critique
Project: Design A House

**Materials**
- Straw Groups - Toothpicks
- Stick Groups - Popsicle Sticks
- Brick Groups - Craft Bricks

**Design Challenge**
Design a house strong enough to withstand a gust of wind!

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*Ask*  
*Explore*  
*Evaluate*  
*Model*
“I revised my structure by adding more sticks and more clay.”
Sharing the Public Product
Implement PBL in A Blended Classroom
How do you scale PBL across your building?
Further Reading on PBL

Read:

- Why Project-Based Learning?- (BIE)
- Gold Standard PBL: Essential Project Design Elements (BIE 2014)
- Benefits-of-PBL-Infographic
- Getting Started With Project-Based Learning (Hint: Don’t Go Crazy)- Edutopia
- 8 Tips for Building Successful Project-Based Learning Units (Concordia university-Portland Blog)
- 5 PBL Pitfalls to Avoid - Edutopia
Checklist for PBL Components for Teachers and Leaders

- Key knowledge, understanding and success skills
- Challenging problem or question
- Sustained inquiry
- Authenticity
- Student voice and choice
- Reflection
- Critique and revision
- Public Product
Questions?
Thanks for attending!

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