New Tech Network

SCALING INNOVATION
Impact in South Carolina, Texas, and California

Five Steps to Make PBL Stick

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NEW TECH NETWORK
@newtechnetwork | #newtechnetwork | #CoSN2018
WHO’S IN THE ROOM?
PAIN POINTS

WHAT PROBLEM ARE YOU TRYING TO SOLVE?
HIERARCHY OF CHANGE

STUDENT ACHIEVEMENT
INSTRUCTION & ASSESSMENT
POLICIES & STRUCTURES
CULTURE & RELATIONSHIPS
PURPOSE & MISSION

CoSN2018
EXponential CHANGE
Designing Learning in the 4th Industrial Revolution
Washington, DC • March 12-15
NewTech Network
Outcomes Determine Pedagogy

1. A Learning Leader Clears the Path

2. Start with the Early Adopters

3. Put Adult Culture First

4. Create a New Normal
OUTCOMES
DETERMINE PEDAGOGY
PITFALL: YOU DO PBL FOR PBL’S SAKE
Knowledge and Thinking
The ability to reason, problem-solve, develop sound arguments or decisions, and create new ideas by using appropriate sources and applying the knowledge and skills of a discipline.

Agency
The ability to develop and reflect on growth mindset and demonstrate ownership over one’s learning-Agency.

Collaboration
The ability to be a productive member of diverse teams through strong interpersonal communication, a commitment to shared success, leadership, and initiative.

Written Communication
The ability to communicate knowledge and thinking through writing.

Oral Communication
The ability to communicate knowledge and thinking through effective oral presentations.
KNOW YOUR “WHY”
KNOW YOUR “WHY”

Ideal Graduate

civil-minded

collaborative
goal-driven

passionate
critical thinker

creative

accountable self-advocate

work ethic

professional

Whatever It Takes!
DOING PROJECTS VS. PROJECT-BASED LEARNING

Traditional Unit with Culmination Project

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Activity</th>
<th>Quiz</th>
<th>Lecture</th>
<th>Activity</th>
<th>Quiz</th>
<th>Review</th>
<th>Exam</th>
<th>Project</th>
</tr>
</thead>
</table>

Project-based Learning Unit

- Project Launch
  - Entry Event and Rubric Create “Need-to-Knows” and “Next Steps”

- Activities
  - Workshops
  - Lectures
  - Homework
  - Research
  - Labs

- Simulations
  - Discussions
  - Modelling
  - Reading
  - Interviews
  - Quiz

- Creating
  - Feedback
  - Building
  - Writing
  - Preparing
  - Drafts

- Culminating Event & Presentations
  - Authentic demonstration of deeper learning

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LEARNING OUTCOMES

New Tech Network
Knowledge and Thinking
Written Communication
Collaboration
Oral Communication
Agency

Deeper Learning Competencies
Master Core Academic Content
Think Critically
Work Collaboratively
Communicate Effectively
Develop Academic Mindsets
What do these scores tell us about Rodney’s performance at school?

<table>
<thead>
<tr>
<th>Title</th>
<th>Grade</th>
<th>Score</th>
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<tbody>
<tr>
<td>Algebra II</td>
<td>C</td>
<td>79.70%</td>
</tr>
<tr>
<td>American Studies (History and Language Arts)</td>
<td>B</td>
<td>82.15%</td>
</tr>
<tr>
<td>Chemistry</td>
<td>C</td>
<td>76.90%</td>
</tr>
<tr>
<td>Digital Media II</td>
<td>B</td>
<td>89.85%</td>
</tr>
<tr>
<td>Internship</td>
<td>B</td>
<td>81.89%</td>
</tr>
<tr>
<td>Physical Education</td>
<td>B</td>
<td>89.39%</td>
</tr>
</tbody>
</table>
What can these Echo™ screenshots tell us about Rodney’s performance?
PITFALL: ADMINISTRATOR DOESN’T UNDERSTAND PBL; DOESN’T LEARN WITH FACULTY; DOESN’T KNOW HOW TO MAKE IT EASIER

LEADER CLEARS THE PATH

A LEARNING
## TOOL: PRINCIPAL’S RUBRIC

**New Tech Network Principal Rubric**

<table>
<thead>
<tr>
<th>LEADING LEARNING</th>
<th>MAINTAINING A STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modeling learning, fostering leadership, Clearing the path</strong></td>
<td><strong>Staff and leadership are unclear as to the performance and behavior expectations the organization has for them.</strong></td>
</tr>
<tr>
<td>Principal unclear on elements of design, or execution of quality PBL.</td>
<td>Principal understands the elements of good design in PBL.</td>
</tr>
<tr>
<td>Principal demonstrates a fixed mindset, or doesn’t share his/her learning.</td>
<td>Principal understands quality PBL facilitation/execution.</td>
</tr>
<tr>
<td>Principal learns with faculty.</td>
<td>Principal learns with faculty.</td>
</tr>
<tr>
<td>Systems, if they exist, are inadequate for allowing regular collaboration among staff.</td>
<td>Systemic mechanisms are in place for collaboration about instruction to regularly occur.</td>
</tr>
<tr>
<td>Improvement work may not happen, or is done only sporadically without focus.</td>
<td>Improvement work is based upon an agreed-upon focus, informed by data, and done in cycles.</td>
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<tr>
<td>Principal uses PBL design for professional development or other learning experiences for faculty and/or students.</td>
<td>Conversations about instruction yield better teaching, and identification of best practices that are shared among all faculty.</td>
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<tr>
<td>Principal models quality PBL facilitation when possible.</td>
<td>Improvement work is done through cycles that iteratively increase in scale to yield system-wide positive change.</td>
</tr>
<tr>
<td>Principal models and shares own learning regularly, and encourages a growth mindset.</td>
<td>All staff members are clear about the performance and behavior expectations of the organization.</td>
</tr>
</tbody>
</table>
REFLECT / DISCUSS

To what extent should the leader know PBL? Is there a minimum bar?

How can you develop leadership’s knowledge and skills around PBL?
START WITH THE EARLY ADOPTERS

PITFALL: TEACHERS DON’T HAVE THE RIGHT MINDSET FOR BEING INTREPID
REFLECT / DISCUSS
TOOL: PROFILE OF EARLY ADOPTERS
RUBRIC
PITFALL: DIFFERENT CULTURAL EXPECTATIONS FOR ADULTS THAN FOR KIDS
REFLECT / DISCUSS

What gets in the way of creating a cohesive staff/adult culture?

What obstacles must you overcome to allow early adopter staff to exercise creativity?
CULTURE BUILDING ≠ TRUST FALLS

CULTURE = MAXIMIZING TIME FOR INTERACTION

Protocols
Practicing and Preaching

Built-in common collaboration time
Teachers are often challenged by collaboration

Walk the Talk
Discussions about instruction, not logistics
PITFALL: PBL PRACTICE HAPPENS ONLY / IN JUST A FEW SPOTS

CREATE A NEW NORMAL

EXPERIENTIAL LEARNING

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TOOL: DECISION-MAKING PROTOCOLS

Link Here
<table>
<thead>
<tr>
<th><strong>KNOW</strong></th>
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REFLECT / DISCUSS

Have you identified your learning outcomes? How are they aligned with your “Why”?

How do you know your students have achieved those outcomes? What does assessment look like?
ADDITIONAL INFORMATION
A POWERFUL DESIGN FOR SCHOOL CHANGE

TEACHING THAT ENGAGES
Meaningful, problem-solving approach to instruction

OUTCOMES THAT MATTER
Student outcomes that clearly define success

CULTURE THAT EMPOWERS
School-wide culture of empowerment for students and adults

TECHNOLOGY THAT ENABLES
Use of technology tools for easy access to resources and information
QUESTIONS?