Incorporating STEM

Using Project Based Learning

Carlita Gordon
Introduction - What is STEM?
STEM IS.....

➔ STEM Education
➔ STEM Literacy
➔ STEM Learning Ecosystem
What is Project Based Learning (PBL)?
Project Based Learning (PBL) is...

Instructional methodology that encourages students to learn and apply knowledge and skills through an engaging experience. PBL presents opportunities for deeper learning in-context and for the development of important skills tied to college and career readiness.

Three characteristics of a meaningful PBL:

1. Interdisciplinary
2. Rigorous
3. Student-centered
WHAT? WHY? HOW?

What is Project Based Learning?
*Definition and how it is achieved

Why Project Based Learning?
*Reasons and Framework

How do the students benefit from Project Based Learning?
*Student Impact/Important Elements
PBL Setup - What Every Project Needs

➔ Key Standards
➔ A Driving Question
➔ Student Voice/Choice
➔ Authenticity
➔ Inquiry and Innovation
➔ Feedback and Revision
➔ Reflection and Public Product
Where to next…. Additional Resources for PBL

➔ Buck Institute
  ◆ http://bte.org
  ◆ http://pblu.org

➔ New Tech High
  ◆ http://hightechhigh.org/student-work/student-projects

➔ Edutopia
  ◆ https://www.edutopia.org/article/project-based-learning-and-research-paper