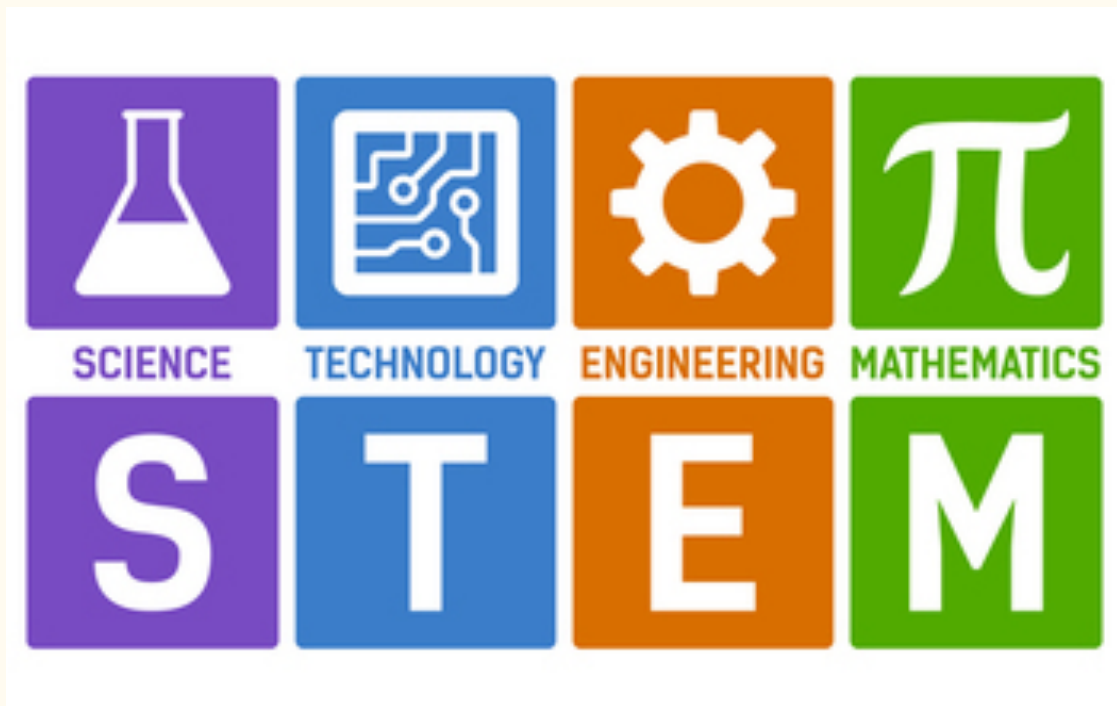


# Incorporating STEM

Using Project Based Learning

Carlita Gordon

# Introduction - What is STEM?



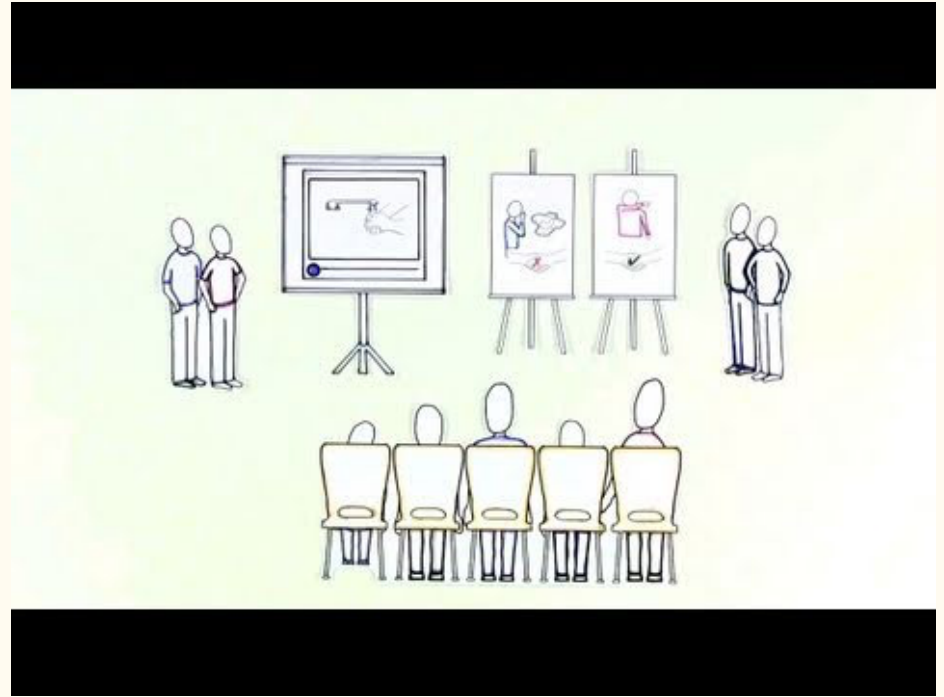
STEM IS.....

→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>