Project-based Learning

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Activity:
Two Truths and a Lie

Use the cue cards to write out three statements - two true and one that is not true (in any order) - related to your experience either leading or participating in collaborative projects with others.

PBL: A Definition

"Project-based learning empowers learners to collaborate in teams, mentored by their teachers, as they research real-world questions, pose solutions to real-world problems, and design real-world products in a rigorous way."

PBL Phases

1. **Preparing**   *building a PBL skillset*
2. **Initiating**   *generating a project idea*
3. **Planning**   *developing and pitching a proposal*
4. **Executing**   *carrying out the project*
5. **Assessing**   *monitoring and modifying the project*
6. **Publishing**   *publicly sharing the project's results*
7. **Closing**   *reflecting on & archiving the project*

PM Knowledge Areas

- Communications
- Cost
- Human Resource
- Integration
- Procurement
- Quality

- Risk
- Scope
- Stakeholder
- Time

Discussion: PBL Risks

Risk management is a key project management knowledge area.

In so far as PBL can be viewed as a 'project,' **what are the inherent risks of employing PBL with students and how might such risks be managed?**
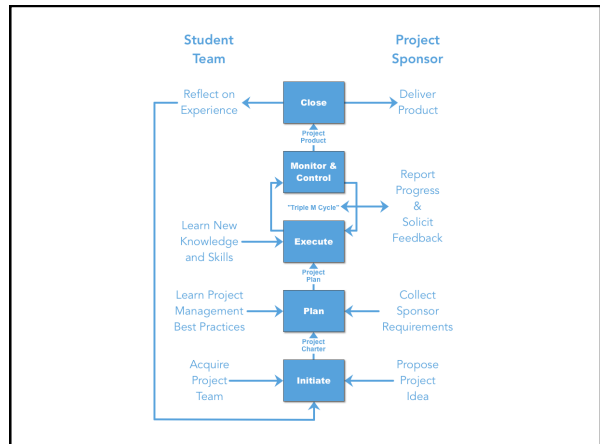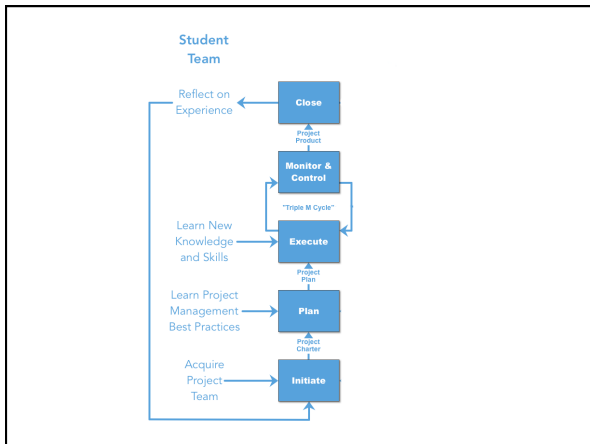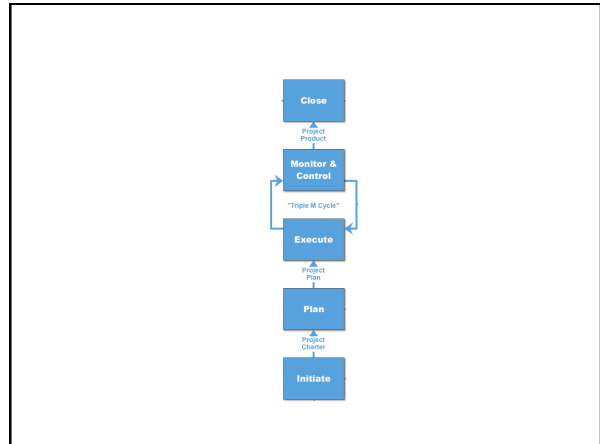
Video: PBL Best Practices

Jot down key words and phrases that point to the project management best practices the Stanford PBL team employed.

Video: PBL Best Practices

Brock University Design Studio

- Modeled on project-based learning
- Interdisciplinary teams of students
- Course-based
- Interactive media projects
- Community organizations serve as external clients
- Service learning philosophy

Brainstorm:
PBL Proposal Components

What are the key 'look fors' a student team should be expected to address in their project proposal?

PBL Proposal Components

Project Title	Personnel
Duration	Resource Requirements
Audience	Work Breakdown Structure
Sponsor	Task Lists
Driving Question	Schedule
Rationale	Risks and Constraints
DLE Alignment	Assessment Rubrics
Deliverables	Other ???

Qualities of a Driving Question

Authentic	Local
Challenging	Motivating
Clear	Multi-disciplinary
Controversial	Open-ended
Empowering	Real-world based
Feasible	Standards-based
Intriguing	Timely

Example Driving Questions

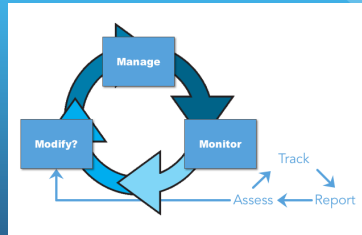How can we improve the ecological health of our school grounds?

How could the lessons of World War II be depicted in a historical drama we create?

How have writing styles changed over time?

What factors determine the growing popularity of new musical genres?

What is the best design for a scale model that simulates the effects of wind on a suspension bridge?

The Triple-M Cycle

The Triple-M Cycle

In your small group, choose one the processes from the Triple-M Cycle and discuss how a project one of your members led or participated in successfully leveraged elements of this process.

Your Advice:
A PBL Guide

Please use the cue cards to suggest a few topics for inclusion in a project-based learning handbook for instructors.

PBL Resources

- Buck Institute for Education (bie.org)
- Center for PBL (wp.wpi.edu/ projectbasedlearning/)
- EduProject (eduproject.org)
- Project Management Institute (pmi.org)
- Project Management Educational Foundation (pmief.org)

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