

Project-Based Learning Academy of Excellence Project Planning Kit

Essential Question

The essential question is the linchpin of any Project-Based Learning unit. The essential question is a worthy, non-googleable proposal that inspires inquiry while students seek unique solutions.

***R.O.P.E** students into learning by crafting your essential question around the following prompts:*

- **Relevance:** *Will students be able to connect to the question?*
- **Open-Ended:** *Could there be more than 1 answer to the question?*
- **Provocative:** *Is the question intriguing and will students want to answer it?*
- **Exploration:** *Will the question create a desire to explore an answer?*

How can video games be used to preserve the stories of a place, and educate and inform others about the stories and myths of the cultures of that place?

Community Impact, Relevance

Relevance removes the "why am I learning this?" question and impassions students to engage with the essential question. Relevant projects also have a lasting product, where student work has a lifespan beyond that of the project itself.

Why is this project relevant to students and their community?

*-help preserve stories and myths in digital form
-help bridge boundaries and create empathy and understanding by studying the stories of other cultures
-prepare future game developers to incorporate diverse and unique game stories beyond the traditional narratives*

Project Description

What will your students be studying and creating over the next 6-8 weeks? Briefly describe the project process.

1. Students choose a place they feel connected to (their home, a place with family history,

a place they want to visit, etc).

2. Students research the mythology and stories of that place
3. Students discuss how to implement myth in a culturally respectful and accurate way
 - a. Contact cultural expert (i.e. tribal leader, author, museum staff, etc)
 - b. Class group discussion of ramifications
4. Students compose a paper outlining the myth, its history, and the outcomes of discussion
5. Students create a game design document and/or a game bringing the myth to life

Project Launch

What activity will students engage in to bring interest and curiosity to the PBL Unit?

Field trip to cultural center, museum
Bring in local authors/storytellers
<http://www.sitasingstheblues.com/>
Teacher produced Video game, "Coyote Steals Fire"

Project Deliverables

What projects will the students be engaging on their path to the final product? How will these projects link together to allow the student to create an informed final product?

Rubric for group discussion
Edited paper describing project
Final game design document and/or game

End Project

What will students be creating and presenting at Exhibition at the end of this project?

Students will play and critique each other's games
Really good games can be sent to museums and cultural centers, or uploaded online to game sites
All games can be showcased on school website.

Exhibition

To whom will students present their projects? How will projects live on after Exhibition?

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All games can be showcased on school website.*

Course Competencies

What course competencies and accompanying learning targets (standards) will this project focus on?

[CCSS.Math.Content.HSF.LE.B.5](#)

Interpret the parameters in a linear or exponential function in terms of a context.

[CCSS.Math.Content.HSA.CED.A.2](#)

Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

[CCSS.Math.Content.HSN.VM.A.1](#)

(+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., \mathbf{v} , $|\mathbf{v}|$, $\|\mathbf{v}\|$, v).

[CCSS.ELA-Literacy.RH.9-10.1](#)

Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

[CCSS.ELA-Literacy.WHST.9-10.2](#)

Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

[CCSS.ELA-Literacy.WHST.9-10.6](#)

Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

Math and Literacy Integration

What math and literacy skills will be incorporated in this project?

Math integration ideas:

Various math requirements to get game working: component vector velocity, collision detection, reflection, gravity, etc.

Literacy integration ideas:

Edited paper

Traits of a Young Professional

Describe how you intend to incorporate the Traits of a Young Professional and monitor growth.

Collaboration: students can work in teams

Professionalism: students produce quality work and manage time

Perseverance: making a game is REALLY HARD AND TEDIOUS

Self-Direction: Students choose their story and how to implement it as a game

Communication: Students discuss complex topics such as cultural sustainability and respect, and offer critiques of each other's work

