

Portland State University

PDXScholar

---

Online Northwest

Online Northwest 2019

---

Mar 29th, 2:15 PM - 3:00 PM

## Video Games in One-Shot Library Instruction

Sergio A. Lopez

Mt. Hood Community College, sergiolopezpdx@gmail.com

Follow this and additional works at: <https://pdxscholar.library.pdx.edu/onlinenorthwest>

**Let us know how access to this document benefits you.**

---

Lopez, Sergio A., "Video Games in One-Shot Library Instruction" (2019). *Online Northwest*. 9.  
<https://pdxscholar.library.pdx.edu/onlinenorthwest/2019/schedule/9>

This Presentation is brought to you for free and open access. It has been accepted for inclusion in Online Northwest by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: [pdxscholar@pdx.edu](mailto:pdxscholar@pdx.edu).



# Video Game “Quizzes” in One-Shot Library Instruction

Sergio Lopez  
Mt. Hood Community College

Online Northwest  
March, 2019




# This presentation:

Going from writing quizzes to make video game snippets

My introduction to video game development

Discovered video game open source community

Explored several current video game themes, subjects, approaches.



# Before -and -after quizzes

Online [form](#). Link through Libguides.

Students would take the quiz and look at their results as a class in real time..

Successful at introducing concepts, glimpse at immediate retained information, graphically show students their progress.

Not so much at being engaging, addressed only the more traditional learning style.



# ~~Animated tutorials~~ Videogames

Project began to develop while taking HTML/CSS/JS classes through Treehouse.

Started work on a simple animated library “tutorial”, with a graphical interface and some ability for user input. Doing everything from scratch became time consuming.

[Developing an Online Platform for Gamified Library Instruction](#)

[Does Physical Activity Enhance Learning Performance?](#)

[The granddaddy of them all](#)



## 3 things I learned

Video game development.

Open source video game development community.

Variety of themes and subjects.



# About games: the basics

A game:

1. Has to have a goal
2. Has to have rules
3. Has to provide feedback to the player\*

\*Reality is Broken. Jane McGonigal. Penguin (2011).



# Brief intro to game engines

```
function preload(){  
  
  // loads assets into memory when game starts};  
  
function create(){  
  
  // display objects as soon as the program calls them, creates world};  
  
function update(){  
  
  // simulation and feedback};
```





## Video game development: game engines



**GODOT**  
Game engine

---

## Game engine: Unity



Pros: the engine of choice by both many well established game developing companies and beginners, loaded with features, soft learning curve, tons of support, many YouTube tutorials, classes on lynda.com!

Cons: not open sourced, proprietary license allows “limited” use using the engine for free.



# Games made with Unity

[Pokemon Go!](#)

[Cuphead](#)

[Monument Valley 2](#)

---

## Game engine: Phaser

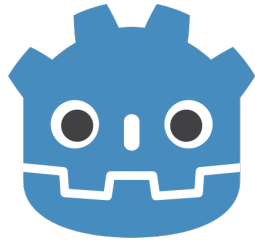


Pros: open source (MIT), lots of support and tutorials on YouTube, classes on Udemy, HTML5 ready development (javascript), touch screen compatible, plays on virtually any device.

Cons: no GUI, steeper learning curve than Unity, game needs to run from server.

---

## Game engine: Godot



**GODOT**  
Game engine

Pros: open source (MIT), super powerful and full of features, awesome GUI, enjoys a great community of users and developers, can run locally and online, available in most platforms.

Cons: not online first, great for big projects, not so much for small game snippets, If you have an epic project and need the best tool available open source, this is it.



# Open source community: art, audio, tutorials

Video game art

- [opengameart.org](http://opengameart.org), [kenney.nl](http://kenney.nl)

Audio and sound effects

- [freesound.org](http://freesound.org), [freetousesounds.com](http://freetousesounds.com)

Tutorials

- [Phaser examples](#)



# Putting it all together

[Database Review Car Race](#)

[Just a Normal Day at Jen's Library](#)

[Beam Tower](#)

[Beam Tower with Violence](#)

[Boolean Shootout](#)



# Current trends in education

Specifically in online, off-classroom learning

Flipped classrooms

Active learning

Problem solving learning

Experiential learning





## *Different* kinds of video games

[A Night in the Woods](#)

[Celeste](#)

[This War of Mine](#)

[Gris](#)

[Return of the Obra Dinn](#)

[Monument Valley](#)

[Monument Valley II](#)

[My Brother Rabbit](#)

[Florence](#)

[Old Man's Journey](#)



## Conclusion:

Using video games to create learning objects.

Open source assets tools available

Video game makers expanding possibilities, using complex themes.



# References

Jared Cowing. "Developing an Online Platform for Gamified Library Instruction." *Code4Lib Journal*, no. 35, 2017, pp. Code4Lib Journal, 01 January 2017, Issue 35.

Kaneko K, Saito Y, Nohara Y, Kudo E, Yamada M. Does Physical Activity Enhance Learning Performance? Learning Effectiveness of Game-based Experiential Learning for University Library Instruction. *Journal of Academic Librarianship*. 2018 Sep 1;44(5):569-581. <https://doi.org/10.1016/j.acalib.2018.06.002>

McGonigal, Jane. *Reality Is Broken : Why Games Make Us Better and How They Can Change the World*. Penguin Press, 2011.

Oregon Trail game available online through <https://classicreload.com/oregon-trail.html>