

# Project BoxSand

FOR DR. KENNETH WALSH AT OREGON STATE  
UNIVERSITY DEPARTMENT OF PHYSICS

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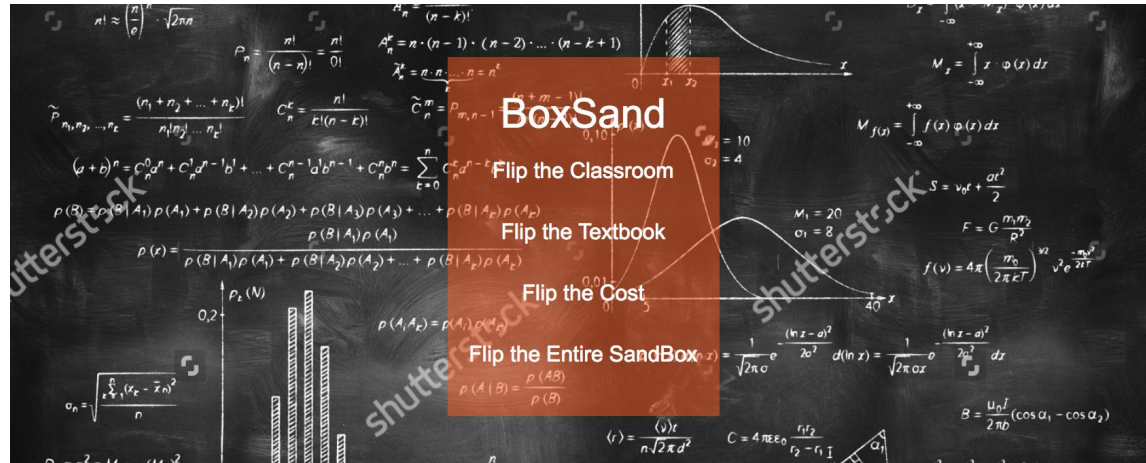
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# What is Project BoxSand?

# WHAT IS PROJECT BOXSAND?

Project BoxSand was initiated by Dr. Kenneth Walsh at Oregon State University in 2015 and the first stage was deployed Fall 2017.



*Fun Fact: Project BoxSand was named as such because it represents the idea of flipping the way students learn so Dr Walsh literally flipped the word “Sandbox”*

# WHAT IS PROJECT BOXSAND?

An open source Learning Module System that will be used by students to learn course material and complete online homework through an all-in-one online learning environment. The main goal of BoxSand is to improve student performance by providing access to free and open source resources all in one place. This includes links to

- Lector and Explanatory Videos
- Practice problems and homework problems
- Simulations
- Free to use textbooks
- Links to other educational websites

# PURPOSE AND GOALS

- Develop long-term and overarching development goals and procedures for future project development.
- Create an initial proof of concept for site functionality demonstration and future feature integration. This entails a website that...
  - Provides access to the OpenStax Physics textbook within the site and allows an instructor to assign reading from this textbook.
  - Provides a homework system where an instructor can provide questions, assign a value to the question, and create an assignment out of a grouping of questions.
  - Provides a way for students to complete the assigned homework and reading.
  - Provides a way for an instructor to download a gradebook of scores.

# Progress of the Project

# CURRENT PROGRESS OF THE PROJECT



## Plan for Implementation

- Develop Understanding of Project Requirements
- Research potential solutions and methods of achieving the goals
- Create initial plan for implementation

## ☐ Phase One of Implementation

- Formulate a development space
- Begin development of the site

## ☐ Phase Two of Implementation

- Wrap up development for this cycle of the project
- Prepare project for use by the next development team

# STUMBLING BLOCKS

Money Motivator Issue - Reluctance to cooperate due to our end product being free to use

Bureaucratic Approval System - Our product needs to pass approval by several different Oregon State entities in order to be allowed in the classroom.

Partnership issues between us and OpenStax and us and Canvas.



# RETROSPECTIVE

<u>Positives</u> The good things that have happened	<u>Deltas</u> Changes that need to be implemented	<u>Actions</u> Actions that will be implemented
<ul style="list-style-type: none"><li>• Establishment of requirements and goals of the project.</li><li>• Developed a plan for how the project will be implemented.</li></ul>	<ul style="list-style-type: none"><li>• Canvas vs OpenStax decision needs to be made.</li><li>• If Canvas is chosen, the requirements document and the design document will need to be altered.</li></ul>	<ul style="list-style-type: none"><li>• Set up the work environment</li><li>• Create a basic version of the site that allows for:<ul style="list-style-type: none"><li>• Users to login</li><li>• An instructor user to create homework and reading assignments</li><li>• A student user to complete homework and reading</li><li>• Instructor user to access grade information of students</li></ul></li></ul>

Thank you for  
watching.