

White House 3D

Teaching the White House and American History through 3D simulation

Lesson: Teaching the White House and American History through 3D simulation

Objectives: 1) Students will gain a basic understanding of the White House and American History through 3D simulation and visualization,

2) Students will gain a deeper understanding of the White House and how it has evolved over time

Activity: Students travel through the White House in real-time 3D, helping them to understand its structure and function



Materials:

White House3D Homepage

(click or cut and paste URL into browser)

<http://www.sunrisevr.com/whitehouse3d>

3D Simulation and Investigation

3D simulations are designed to make subject matter more engaging to today's technology-savvy kids, and help them bridge the gap between the "concrete" world and the abstract world of concepts. When students experience complex subject matter in real-time 3D it becomes clearer. Students learn best when they are actively immersed in subject matter from a variety of different viewpoints; 3D simulation is designed to help students visualize difficult ideas and objects through investigation at any scale (atomic, cellular, planetary, conceptual, etc), and doing things that would normally be impossible.

Required Technology

- Unity3D/Flash-Enabled Computer
- Internet Access

Optional Technology

- Projector
- Multiple Computers

Grouping

- Large Group Instruction
- Small Group Instruction
- Individualized Instruction

Staging

Check computer for Internet access, Unity3D/Flash, and projection if needed.

Procedure

1. Access program
2. Pick a lead student navigator to control movement through the 3D environment
3. Pick a lead student reader to read information about the White House as it appears on-screen
4. Begin the lesson by asking students what they already know about the White House; write responses on the board
5. Review basic facts about the White House including:
 - The White House is the residence of the President of the United States
 - The White House has great symbolic power
6. Start traveling through the program; ask students where the class should go
7. Use the 3D simulation as a visual aid; explain information as needed
8. Have students pay special attention to:
 - The facilities of the White House
 - The symbolic significance of the White House
9. Have a final wrap-up with students with a question and answer period about the White House. Ask them how it was built. Ask them what parts of the White House they found interesting

Optional Activity: 3D Scavenger Hunt + Discussion

Have students find a particular part of White House, such as the Oval Office. If students are on multiple computers, have them “race” to the part of the White House the teacher wishes to highlight. Once students find/arrive at the location, the teacher may commence discussion. Repeat in other areas of the simulation as desired to build understanding.

Homework/Review

Students may also access the program outside the classroom to supplement textbook questions

Functional Notes

1. The program is available on multiple platforms
2. If using the program online, please ensure the Unity3D Player is installed on the computer; through the Internet Explorer Browser; download the latest at <https://unity3d.com/webplayer>.
3. If you see something in **red** you can probably click on it
4. For ease of use you can go through most 3D objects, and even the ground
5. The school library can request and access programs (free) at www.sunrisevr.com for off-line use via PC and Mac if there is no internet connection