

Lesson Plan: 3-D Modeling with Blender

Lesson Title: From the Plane to Space: Rendering Images Spatially

Grades: 9-12

Communicative Objective/Standards	<p>Students will learn how to create static and motion graphics from free, open-source software manufacturer, Blender.</p> <p><u>Standards Addressed</u></p> <p>1. Cite Specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context.</p> <p>5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</p> <p>8. Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.</p> <p>10. By the end of student's respective grade, read and comprehend science/technical texts independently and proficiently.</p>
Anticipatory Set	<p>To awake students' creativity, teacher begins lesson by showing a clip from animation made entirely on Blender software here: https://www.youtube.com/watch?v=Z8l8WNHwTOg</p> <p>After clip, tell students that all footage was created on free, open-source software available to anyone and that the next lesson will involve creating some versions of still images shown in video!</p>
Input/Modeling/Presentation	<ul style="list-style-type: none">➔ Guide students to website: www.blender.org and download current version of software.➔ Confirm students are able to open software and guide them through the very brief user guide. Teacher: preview and play this video before class to gain a sense of what you will be teaching: https://www.youtube.com/watch?v=39-CWSn_kms➔ Direct students to youtube video for basic tutorial on modeling text: https://www.youtube.com/watch?v=39-CWSn_kms <p>cont...</p> <ul style="list-style-type: none">➔ Students may finish early and want to progress, guide them

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	to other videos by same author, such as: https://www.youtube.com/watch?v=9PJL0eAuZ_E&list=PLzmyR17f55-LVbgnzhS4XI9zJ3dSCdYW3
Check for Understanding	Circle room to assist with issues and check on progress. Ask students to use proper save method discussed in tutorial and send a copy to your email. (If you are also building websites, this is a good opportunity to upload them to websites)
Independent Practice/Evaluation	Students are required to complete a minimum of 3 tutorials, and based on skills learned from each, combine elements into their own creation.
ELL Modification	ELL's will be paired accordingly in groups of strong leadership. Individualized assignment modification will vary. Accommodations will include: Google translate for research component, audio and, or video support in native language for additional support and tutoring on every facet of project.
GT Modification	Students that show a mastery for content and complete the task at an accelerated rate may have the opportunity to dig deeper into the content. Encourage students to research other methods for creating the project being studied, as well as the history and direction of this art form.
SPED Modification	Students struggling to complete the task may have a modified workload, dependent on their IEP. If a GT student shows strong leadership skills, this is a great opportunity to encourage peer to peer teaching.