Educational Technology @ Washington College's Guide to 3D Model & Virtual Tour Resources

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Questions? Contact Raven Bishop rbishop3@washcoll.edu

The following resources DO embed well in Canvas.

Smithsonian 3D Digitization: https://3d.si.edu/

"The 3D Program is a small group of technologists working within the Smithsonian Institution's Digitization Program Office. We focus on developing solutions to further the Smithsonian's mission of "the increase and diffusion of knowledge" through the use of three-dimensional scanning technology, analysis tools, and our distribution platform.

This work is already transforming core functions of our museums. Researchers in the field can now come back not only with specimens, but also 3D data documenting entire sites. Curators and educators are using 3D data as the basis for telling stories and sending students on quests of discovery. Conservators are using 3D data to track the condition of a collection item over time using 3D deviation analysis tools, showing exactly what changes have occurred to an object."

Sketchfab: https://sketchfab.com/feed

"Sketchfab is empowering a new era of creativity by making it easy for anyone to publish and find 3D content online. With a community of millions of creators who have published millions of models, we are the largest platform for immersive and interactive 3D. Additionally, our store lets buyers and sellers transact 3D models with confidence using our realtime viewer and model inspector.

Our technology is integrated with every major 3D creation tool and publishing platform, and is compatible across every browser, operating system, desktop and mobile. We also support VR and AR on compatible hardware. Our robust APIs let developers support direct uploading and downloading of 3D models; and configure our embeddable 3D viewer as needed."

Sketchfab Museum Collections:
https://sketchfab.com/members?segment=organization%2Fmuseum

Sketchfab Scientific Organization Collections:
https://sketchfab.com/members?segment=organization%2Fscientific-organization&sort_by=-followerCount

Sketchfab Non-Profit Organization Collections:
https://sketchfab.com/members?segment=organization%2Fnon-profit-organization&sort_by=-followerCount&cursor=cD0xMjU%3D

Sketchfab Educational Projects Collections:
https://sketchfab.com/members?segment=organization%2Feducational-project&sort_by=-followerCount

BioDigital Human: www.biodigital.com

"Often referred to as "Google Maps for the Human Body," the BioDigital Human platform is a medically accurate, virtual map of the human body—composed of over 8,000 individually selectable anatomical structures, 600 simulated health conditions, and a toolkit to map and visualize data. This fully embeddable, cloud based software is available in eight languages, on any desktop, mobile device, or in AR/VR for use within any educational or clinical workflow.

BioDigital is used at the top medical schools and education companies, equipping tomorrow's clinicians with the training they'll need to reduce the third leading cause of death - medical errors."

RCSB PDB: Protein Data Bank: https://www.rcsb.org/

"This resource is powered by the Protein Data Bank archive-information about the 3D shapes of proteins, nucleic acids, and complex assemblies that helps students and researchers understand all aspects of biomedicine and agriculture, from protein synthesis to health and disease.

As a member of the wwPDB, the RCSB PDB curates and annotates PDB data.

The RCSB PDB builds upon the data by creating tools and resources for research and education in molecular biology, structural biology, computational biology, and beyond."

The following resources DO NOT embed well in Canvas but are valuable as links:

NASA Astro-Materials 3D: https://ares.jsc.nasa.gov/astromaterials3d/index.htm

"Astromaterials 3D is a virtual library of NASA's collections of Apollo Lunar and Antartic Meteorite samples that was created as an exploration tool for scientific research and the curious public. The mission of Astromaterials 3D is to put these incredible rocks from different origins across our solar system in your hands, virtually.

Conceived and led by Transdisciplinary Artist Erika Blumenfeld, the Astromaterials 3D project began in 2013 with her vision to make these remarkable and rare extraterrestrial samples and their formation stories more accessible to researchers and the public through interactive, high-resolution, research-grade 3D models. Produced by an interdisciplinary team, Astromaterials 3Dis a dynamic intersection of art, science and technology.

Google Arts & Culture: https://artsandculture.google.com/
(Both 3D Models and Virtual Tours; other interactive content)

"Google Arts & Culture (formerly Google Art Project) is an online platform through which the public can view high-resolution images and videos of artworks and cultural artifacts from partner cultural organizations throughout the world.

The digital platform utilizes high-resolution image technology that enables the public to virtually tour partner organization collections and galleries and explore the artworks' physical and contextual information. The platform includes advanced search capabilities and educational tools."

iframes

*Code used to embed another website in html. Replace the **yellow highlighted** part with the url of the website you are trying to embed. Replace **the blue highlighted** part with a descriptive title for the website.*

<iframe src="https://aqua.org/media/virtualtours/baltimore/index.html" width="800" height="450" name="Aquarium VR" allow="xr; xr-spatial-tracking; fullscreen"></iframe>

Virtual Tour Model Resources

Again, **Google Arts & Culture:** https://artsandculture.google.com/
(Both 3D Models and Virtual Tours; other interactive content)

360 Video
Use the search terms **360** or **VR** in YouTube to find immersive video content. Best if viewed with an inexpensive viewer like the Google Cardboard, but also valuable as a link.

Mount Vernon Virtual Tour
https://virtualtour.mountvernon.org/

Vatican Virtual Tour
http://www.museivaticani.va/content/museivaticani/en/collezioni/musei/cappella-sistina/tour-virtuale.html

Digital Scholarship in Museum Partnerships (DSMP) project
Collaboration between Washington College, museums in Kent County (and abroad) led by Raven Bishop, Sara Clarke-Vivier and Julie Markin
https://tiny.cc/dspartners

The Metropolitan Museum of Art : The Met360
https://www.metmuseum.org/art/online-features/met-360-project

Have students CREATE virtual tours with Google Tour Creator!

https://arvr.google.com/tourcreator/