

360° Video How-To Guide

What is a 360° video?

A 360-degree video (or 360° video) is recorded with multi-camera systems that captures all directions at the same time. During playback users can interact with the video and view the scene in any direction by dragging and dropping with a mouse or by panning and tilting a mobile device. Users can view 360° videos on a computer, smartphone, or tablet without special equipment or through a head mounted display to add a virtual reality (VR) experience.

How to Create a 360° Video

Click the images to explore!



Toward more immersive & student- centered learning!

What course contents are suitable for 360° video?

360° video has been integrated into many academic disciplines or course subjects. For example, 360° videos have been used to:



Demonstrate techniques and complex chemistry laboratory equipment



Train medical students on surgical procedures



Help college students reduce public speaking anxiety



Develop an immersive empathy-building experience about bullying in schools



Improve writing performance among English language learners



Improve sports performance



Teach business concepts



Promote empathetic understanding and ethnographic analysis of religious place, ritual, and behavior in religious education



Develop reflective practice for trainee teachers

Explore more examples from SMU professors
at <https://virtualvisitingprofessor.com>!

Recent studies have indicated that learning with 360° VR video might be more appropriate for promoting skill-based knowledge or empathy reflection as opposed to factual or conceptual knowledge.



What are the benefits and drawbacks of 360° videos?

BENEFITS

Students gain an immersive learning experience, an impression that they are participating in a complex, realistic world.

Students feel a greater sense of presence and can be introduced to remote or unfamiliar areas without having to be there physically.

Students have control over what to view or explore in the video, thus actively engaging or interacting with the learning material.

Students gain a more complete perspective and greater detail of an object, space, situation, or historical event thus developing a deeper understanding of and emotional response to the subject matter.

Online learning can be more enjoyable, exciting, and richer.

DRAWBACKS

Students can get distracted while engaging with the VR environment or become disoriented when looking around in the video.

A slight degree of motion sickness or physical discomfort may be experienced.

The image or video quality produced with 360-degree cameras can be low, leading to unreadable text or unclear vision.

The file transfer and on-demand streaming can be problematic due to large file size and high bandwidth requirements. As such, access to 360° video may be restrictive for some students.

Instructors would need to be sufficiently motivated and creative to produce a video with strong story-telling to keep students' attention on specific visual items on the video.

Where do I go from here?

Before investing your time and energy in creating a 360° video, explore available, open-source 360° videos online that are relevant to your course contents such as educational [360° videos on YouTube](#). You can create a playlist of relevant videos or post the links to these videos on Canvas to supplement your lectures. Once you are familiar with this type of video and see how effective or ineffective 360° video is for your courses, you can decide to take the next step as you see fit. Enjoy your exploration!