





LEARNING OBJECTIVES

- Understand how creating stories for virtual reality (VR) film, requires different techniques when compared
 to traditional filming methods.
- Analyse the techniques that VR films use to direct and guide viewer attention towards action and plot development.

LESSON PLAN DETAILS

BACKGROUND

With immersive technology we have new ways to tell stories about the world around us and interact within the digital world. 360-degree virtual reality, also known as 3DVR or stereoscopic VR, has enabled storytellers to build compelling content. For example, journalists can use 360-degree VR to evoke empathy in people and encourage support of global and social issues such as mental health, human rights, diversity, and climate change.



The impact of these tools can be powerful, so it is important to understand how an overall message or story is communicated using this medium.







PREPARATION

This lesson plan is designed for a 30-minute session in which students experience 360 film via the Google Cardboard VR glasses provided with this lesson pack.

HEALTH AND SAFFTY

It is always **recommend sitting** when participating in VR experiences. It is also useful to consider having **pairs of students** working in partnership through the activities. A partner creates an additional safety measure because the partner who is observing can ensure that his or her partner is safely experiencing the VR content.

Before starting, create a list of dos and don'ts.

- No standing up.
- If you are starting to feel dizzy or getting a headache, take the headset off.
- Do not flail hands or legs around to avoid causing potential accidents.

Virtual reality can sometimes be an intensely emotional experience. Remind students that if they are feeling overwhelmed, it's OK to stop.



TECHNOLOGY

To get started, you'll also need some basic technology. Here are some general requirements:



Internet: VR experiences can be downloaded or streamed. We recommend downloading the experience to the device so that streaming issues are avoided.

Mobile Device: Smartphones are essential to powering these experiences. The mobile device is needed to place into the Google Cardboard VR glasses headset.

Without a Headset: 360 videos can also be viewed without a headset, but the experience isn't as immersive. When viewing 360 videos in this format, you can drag the screen while the video is playing to view the surrounding environment in 360 degrees.

Headphones: Headphones allow the user to be more immersed and reduce the disruption to the experience that could arise from using speakers.



LEARNING OBJECTIVES

UNDERSTANDING 3D SPACE

Introduce the students to how 3D space operates in the virtual reality (VR) environment. The **3D virtual** reality space is different from 2D screens and as a result, creating stories for VR needs a new set of rules to build a meaningful user-centred experience. One of the most central ideas to the building a meaningful cinematic VR experience is the ability of the director of the film to predict and indirectly control the user's direction of viewing.





Some of the key changes in moving from a traditional 16:9 cinematic frame to a 360-degree VR cinematic experience are explained in this introductory film by Alan Hook, Senior Lecturer in Interactive Media. It is recommended that you watch this film with students before completing the worksheet below. You can access this at the following link or scan the QR code with your mobile device.

https://www.youtube.com/watch?v=ahYQLwm5MIM



USING DIRECT ACTIONS AND GUIDING CUES

Explain how in 360-degree VR rules are different from traditional filming. In VR film we no longer have the concept of a framing action (close-up, an over-the-shoulder shot, or a cutaway) and you can no longer count on people always looking where you need them to.

So how can VR film build experiences that benefit from the freedom of space that 360-degree offers and augment it with points of direction that enhance the viewer's engagement?

Explain how the director can direct a viewer's attention in VR to particular focus points which can help amplify their experience. This can be achieved by using guiding cues. These are techniques that can be used to steer the user's attention in a smooth, unforced way.

Examples of guiding cues include:



Visual cues - these can be an actor in the scene pointing in a certain direction, text or graphic overlays that work as a point of interest, lighting or colours that highlight and draw attention to an area.



Audio cues - using spatial audio can draw attention in a certain direction. Voiceover or narration can also play a huge role in directing where a user looks. This works particularly well for storytellers - making changes in the volume of the narration could attract the viewers' gaze.

> Compare these techniques to traditional filmmaking where techniques such as cuts, zooms and camera movement can be more intrusive.



USING DEGREES OF FREEDOM IN 360-DEGREE VR

The concept of **degrees of freedom (DOF)** is important in understanding 360-degree virtual reality. DOF refers to the amount of flexibility a user is given within an environment.

In 360-degree immersive videos you enjoy the freedom to move your head around and look in any direction, however, you are not able to walk in those directions as you would in computer generated (CGI) environment which is highly more immersive and interactive.

360-degree VR generally offers three degrees of freedom, whereas six degrees of freedom can be used in computer-generated imagery (CGI) VR environments.



WORKSHEET

Watch the VR film *Help* on your smartphone via the Google Cardboard Glasses provided with this activity. This VR film can be viewed at the following link or scan the QR code with your mobile device.

https://www.youtube.com/watch?v=G-XZhKqQAHU





QUESTIONS

- ©] Can you briefly describe the main narrative in the film?
- How is the story told?

 Consider how the story was told visually, think about what the actors were doing in the scenes, and how this contributes to your understanding of the story.
- ©3. Can you identify instances where guiding cues were used to steer your attention to the unfolding action?
 - > Give an example of how and where your attention was directed by an actor
 - > Give an example of how and where your attention was directed with **motion**
 - > Give an example of how and where your attention was directed with *lighting*
 - > Give an example of how and where your attention was directed with sound
- Did experiencing the film from a *first-person perspective*, bring additional storytelling experiences?

Consider your emotional reactions to the film, and the persuasive devices operating in the 3D space that were used to keep you entertained.

- How did the freedom to look about contribute to your experience?

 Consider how your experience of looking around you enables you to see other events and think about how these other events contribute to the plot development.
- If you were to add six degrees of freedom to this film, where would you add interactive elements for the storytelling?

 Think about what you might interact within the 3D space that would

Think about what you might interact within the 3D space that would involve you directly in how the story unfolds.





ULSTER UNIVERSITY SCHOOL OF COMMUNICATION AND MEDIA

INTERACTIVE MEDIA BSc (Hons)

UCAS Course Code P310

The Interactive Media course at Ulster University is a unique multidisciplinary degree that gives students the knowledge and skills to work across a wide range of media and technical disciplines in the creative media sector, including TV and film production, graphic design, animation, storytelling, digital media content production, web design, interactive documentary, and AR and VR experiences.

The course is designed to enable and guide students to discover their own specialism within the creative media sector, while working closely with and understanding the roles of all creative media design and production disciplines.

Interactive Media prospectus page: https://www.ulster.ac.uk/courses/202223/interactive-media-25151

JOURNALISM BA (Hons)

UCAS Course Code P500

The Journalism course at Ulster combines theory and practice. Students learn news-gathering, writing and editing for television, radio, print and online. The course encourages students to think about why journalism is important, and who makes the news and why? Our practice staff come from a news background and bring real life experience into their teaching.

The subject can be studied as a single honours degree, or a major subject with a minor in English, History or Education.

Journalism prospectus page: https://www.ulster.ac.uk/courses/ 202223/journalism-25349



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