PROTOTYPE 3: SCENARIO – INTRODUCTION TO THE OUTLETS - *FOOD PRODUCTION EQUIPMENT*

With this manual you will learn to create a 360 video experience to introduce students to equipment and context in a practical outlet eg. Kitchen, front-desk etc. In this manual we use an example of an introduction to food production equipment in a kitchen outlet, where 2D videos are placed within a 360 environment to explain how to use different equipment eg. blender etc. However you can use it with or without 2D video to create induction experiences for various contexts and use cases such as practising standard operating procedures (SOP's), job shadowing, remote induction and virtual tours.

Intended outcomes/aims:
- Places the student in a real-life environment to gain familiarity & highlight safety aspects
- Allows learners to practice SOP's in a safe environment to develop job readiness in an efficient way.
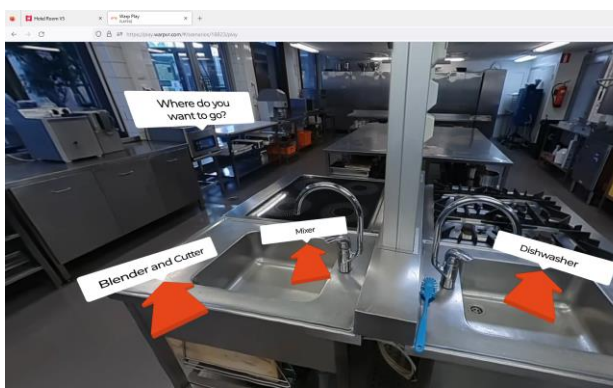
Brainstorming – Planning: 3-4 hours

Decision Tree/Flowcharts: 1 hour

Filming – Editing: 4-5 hours

Total Time: 7-9 hours

Level of Complexity: 4

Ingredients:

Hardware
- o Equipment required includes a 360-camera, stand and microphones.
- o 2D video camera
- o A starter pack for creating 360 experience costs +- €450. Click on this link to see a suggested list with prices (see this list).
- o Flipcharts, markers, sticky notes

Software

WarpVR licence (or open source option Vivista 360 video editor see SEPA360.eu

Limitations
- 2D videos difficult to view in 360
- Time taken to edit 2D videos
- Not fully interactive, cannot move from Point A to Point B in the scene

Benefits
- Maximizes attention, contextual learning, saves time for training

Instructions:

Step 1: Planning

After speaking to instructors and students, one needs to define the learning gaps that needed to be addressed, as well as the learning outcomes. The context for the experience is then determined. The benefits of the medium needed to add value in terms of addressing the learning gap or problem to be solved. For information on Design Based Learning click here.

Step 2 – Develop a Storyboard & then create a Decision Tree

Consider the type of content that would benefit from a 360-degree view and the elements that should be included.
Once you have determined the subject matter, learning objectives, and target audience, plan your scenario, i.e., your storyboard, using a flipchart to help guide your filming and editing processes. For more information on **Story Boards click here**

Now create a decision tree with tree branches to guide the user through the the different learning options available in the kitchen environment i.e. different types of equipment. The storyline should follow a logical flow through the space. Note.The more options you build into the scenario

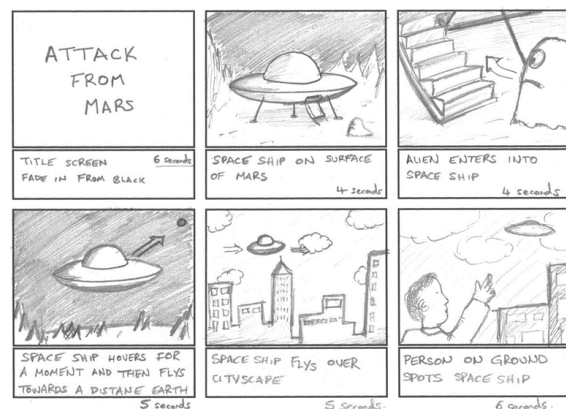the more videos and production time you will need.

Step 1: Team meeting to discuss Planning & Design Based Learning

Step 2: This flowchart/decision tree developed by the team on a whiteboard.

The chart/decision tree above provided the framework for the 360-degree video.

Example of a Storyboard (adapt for your scenario)

Step 3 – Staging

Make sure to set up your scene before you start filming. Get permission to film in the outlet. Choose a quiet location with lots of natural light that supports your video's content and set up your camera to capture a 360-degree view.

Also ensure that there are no distracting objects anywhere in the room as the camera captures 360 degrees of the room you are in.

Make sure your camera is level and stable. Test your camera to make sure it captures the entire scene you want to include. Beware that the area where the front and rear camera images come together will be visible as a stitch line. Therefore, do not place any objects or persons that are relevant to your scenario along this stitch line.

A view of a piece of food production equipment with an actionable hotspot. When the hotspot is activated, the user can view a demo video about how to use the Food Production Equipment. The use of the Food Production Equipment is explained by a Professional Chef.

Step 4 – Recording

To view a step-by-step video guide on how to set up the [Insta 360 One R click here.](#)

Keep the camera at head height unless it needs to be lowered for a better view of equipment. Press record on your camera.

Once the camera person is out of the way, the actor should wait 10 seconds before they start talking / acting (this is not required for a 2D video). Also, allow another 10 seconds at the end of each scene to allow the camera person to return to stop the recording and to get ready for the next scene.

Please note that each branch of your decision tree is a separate video clip. Be sure to capture all the clips included in your storyboard or script.
All these video clips must be recorded under similar circumstances (lighting, attire, makeup).

An image of the Instra 360 One R camera.

Step 5 – Editing

Follow this step only if you are also using 2D video and have video editing experience: Edit your 2D video after you have captured your footage. There are many software options available for editing 2D video including Adobe Premiere Pro, Final Cut Pro (Mac) etc. For Adobe Premiere you will need to add in the 360 video and then add in/overlay the 2D video – Complexity for this step is High!). If this is too difficult, stick to just using 360 video and instead have an actor explain how to use the equipment (note. close-ups are difficult in 360)

Editing 360 video (see step-by-step guide for full details)

Each individual video clip will need to be uploaded to the Warp VR platform. Now:

A. [Download Insta360 studio](#) on your laptop and open the 360 video file so that the two video feeds are automatically stitched
B. Create a "New Scenario" under Course name in WarpVR platform
C. Insert the SD card from the camera into an SD adaptor & into your laptop to upload files
D. Upload the Insta 360 files to "Media"
E. Trim the 360 video in Warp Video Editor

You should now add clickable options corresponding to your branched scenarios and link the answers to the various outcomes.

F. Create a Decision Tree in the "Flow" tab & add each video file to a node
G. Link the nodes by connecting lines
H. Create a Direction scenes as the opening scene to allow the user to take different options (equipment)
I. If using 2D videos, add Hotspots that can be clicked to open 2D videos about how to use the Food Production Equipment.

Consider adding return points to previous steps or to general explanatory coaching advice in case the students have selected options that are not viable or incorrect.

Step 6 – Testing & Sharing

Test the scenario you have created by:

A. Clicking the "Test" option in warp
B. Add users to test the experience, get feedback & make changes

To share the scenario with learners:

C. Add students to the platform by creating a profile and adding their email addresses
D. Students receive an email link to register.
E. They then receive a code

F. If they will be viewing on mobile they need to download the WarpVR app on their phone and insert the code

G. If viewing on a headset (eg. Pico Neo 4 Pro or Meta Quest) the app needs to be downloaded on the headset and the code inserted

Pico Neo 4 Pro for viewing 360 video on Warp platform

Tips for excellence

Need good natural lighting

There is no need for a "word for word" script – indicative text as a support is effective for actors/staff giving a more natural recording/delivery.

Remember that the camera is the student and that the actors should look at the camera

Cheaper immersive alternatives include inserting mobile phones into Google Cardboard for larger classes

The camera needs to be set at eye-level with the actor

Remember that the 360-degree camera records everything in the room (all non-actors must exit prior to recording)

The "Coach" actor should illustrate the 360 immersive experiences at the beginning of the video via hand gesture/general movement and instruction.