Collection of Case Studies for THETA Report

The following case studies are contributions from lecturers who attended the "Train the Trainer" course in Helsinki and then incorporated the new teaching methodologies into their teaching.

Case Study 1 is a contribution from a lecturer in Hospitality and Tourism Management who discusses incorporating WarpVR and Matterport into the module.

Case Study 2 is a contribution from a lecturer in Tourism Marketing who discusses incorporating Fectar and Matterport into the module, with a focus on Fectar.

Case Study 3 is a contribution from a Postdoctoral Research Officer researching the area of Festivals, Audiences and the Digital Experience (FADE)**.** In this case study the lecturer discusses Fectar and classroom implementation.

Case Study 4 is a contribution from a lecturer in languages. In this language module WARP VR and Matterport are regarded as the best fit.

Case Study 1:
Lecturer in Hospitality and Tourism Management

The whole Theta programme was suitable for hospitality programmes but Warp VR and the Matterport Digital Twin systems stood out for me as being highly useful.

The WarpVR is a truly immersive experience, and the use of "Training scenarios" etc., via the VR headsets was really special experience.

The aforementioned was discussed with 3rd and 4th year IHTM classes where it was explained to them how Matterport was currently being utilised by estate agents to showcase properties were people could easily get a full "walk through" experience from a remote environment as the digital twin of a building, both internally and/or externally allows you to get a feeling of being there, and similar to Google-streetview, only for a venue, building, accommodation etc., of your choosing.

Considering how businesses around the world went remote during the pandemic, this is a perfect example of how an online process can be enhanced into a much more tangible experience where the user is more engaged. Similar technologies have been adopted by car sales agents to promote their wares.

The above Matterport type engagement could be thus amplified by tying in WarpVR scenarios into a digital twin. A room, door or link could lead you to an interactive activity from Matterport, where one would then need to put on their head-set, and where a Warp VR scenario/ challenge could be taken to unlock the user to proceed to the next level / floor etc.

The 360-degree view within the headset gives a very special feel, more like gaming and it seems to me like this would work for student engagement and building interest in a topic or exercise. It also feels the most like 'gaming', so it would suit the undergraduate demographic and might be a useful way of making events/subject appealing to them.

There's no doubt that all of the above tools could be used to introduce the modern third level student to a new Institution / work environment etc., before work placement or Erasmus, in presenting their new host location / college / city as a familiar local.

Given the level of anxieties manifest in the current 18-24 demographic (generally the majority in our full-time cohorts), I see the use of these 360 VR landscapes / scenarios complimenting interactive challenges where our students may practice scenarios so that they can then have more confidence when applying their skills in a real-world environment. This would be true for Restaurant Service, Kitchen Safety Training, Cocktail Making, Manning a reservation desk, Dealing with customer queries & situations etc., etc.

Having been exposed to the technology that's out there at our disposal, and following the THETA workshop, it would be difficult not to want to incorporate the potential of VR and XR to enhance the experience, both socially, educationally and personally.

Case Study 2:
Lecturer in Tourism Marketing

The THETA programme offers a comprehensive curriculum designed to equip participants with cutting-edge skills in utilising technology to revolutionise hospitality education. With a focus on platforms like Fectar, Warp VR, and Matterport, this programme aims to empower individuals with the tools necessary to thrive in the rapidly evolving hospitality industry.

The learning experience provided by this programme is exceptional. Participants were guided through a series of hands-on activities and tutorials that clarify the use of advanced technologies. Despite initial apprehensions, many participants found the learning process much easier than anticipated (myself included), thanks to the programme's well-structured and accessible approach. The cookbooks were very useful, and I still use mine now. I plan to produce a version myself for my own Tourism and Technology students.

One of the standout features of the programme is its practicality. Rather than relying solely on theoretical concepts, participants engaged directly with the tools and software, gaining valuable experience that can be immediately applied in real-world scenarios. From creating immersive AR experiences with Fectar to crafting virtual tours with Matterport, participants developed a diverse skill set that is highly relevant to the hospitality industry.

However, it's important to acknowledge the potential challenges associated with implementing the newfound skills. The costs of equipment and software required for advanced tech applications is quite prohibitive for some individuals and organisations. I would love to go deeper with the skills learned and have my students create a digital twin of a destination for a virtual fieldtrip using Matterport. The students can add whatever content, labels, images, gifs they like to the platform to create a truly immersive experience. Despite this hurdle of cost and access, I remain optimistic about the possibilities afforded by my newfound abilities. I have a genuine desire to leverage these skills in the future, even if immediate implementation may be challenging.

For now I am going to concentrate on Fectar as the students can trial the app for free to create the content. The students will select a destination they are interested in creating a virtual tour guide for. They are encouraged to choose a location with cultural, historical, or natural significance, as this will enhance the educational value of their project. Once they have chosen a site, they will then create the storyboard and script for their video. I will assist students in integrating their content into Fectar to build interactive virtual tour guides. I will show them how to place 3D models and multimedia

elements within the AR environment, and how to program interactive features such as hotspot navigation and information pop-ups. I am going to create my own holo-presenter to demonstrate.

Creating virtual tour guides using Fectar provides students with an immersive and interactive learning experience. They engage with the content in a hands-on manner, which can enhance their understanding and retention of information about the destination they're studying. By using tools like Fectar, students develop valuable technological skills such as 3D modeling, content creation, and AR application development. These skills are increasingly in demand in various industries and can enhance students' career readiness.

A heartfelt thank you to the programme tutors and organisers for their invaluable time and expertise in guiding us through the creation of virtual scenarios using Fectar, WarpVR, and Matterport. And thank you for your support and dedication through part 1 and part 2 of the course.

Case Study 3:
Postdoctoral Research Officer
Festivals, Audiences and the Digital Experience (FADE)

The THETA experience has been incredibly beneficial for both my research and teaching professional development.

In terms of research, I am a postdoctoral researcher involved in an Irish Research Council project focusing on 'Festivals, Audiences, and the Digital Experience.' Before participating in the THETA course, I had been working on developing 360-degree footage of festivals for VR headset use with my colleague Brian Vaughan, who directs the Virtual Interaction Research Lab at TU Dublin. With limited prior technical knowledge of Extended Reality programs and applications, the THETA program proved invaluable in enhancing my skills and understanding of Extended Realities within the context of our research project.

This newfound expertise allowed me to provide valuable feedback to my colleagues on FADE and engage with festival stakeholders, benefiting both the research project and my own professional growth as a postdoctoral researcher.

From an educational standpoint, among the various apps explored during the THETA program, Fectar stands out to me as particularly promising for classroom implementation.

Currently, I am working on developing a lesson plan based on a chapter recently published in a Routledge publication with my colleague, focusing on Hybrid Festivals and Inclusivity. I see immense potential in incorporating Fectar into this lesson plan, not only to create Extended Reality experiences for student engagement but also to involve students in developing their own virtual experiences. With experience spanning across

the School of Hospitality and Tourism and the School of Media, coupled with a background in teaching design, I envision students benefiting from hands-on experience in crafting their own Extended Reality encounters.

This not only equips them with technical skills in Extended Reality development but also encourages them to consider inclusion and accessibility aspects in event and festival planning. Through the creation of their own festival and event experiences in Extended Realities, students can actively engage in the process of learning and understanding the complexities involved in crafting meaningful experiences.

The THETA program was well organized and executed by the entire THETA team. Their expertise and insights were invaluable, and their personalized guidance tailored to individual teaching interests was incredibly encouraging. I firmly believe that the THETA program holds potential for educators in hospitality, tourism, and beyond

Case Study 4:
Lecturer in Languages
The use of VR in languages education

In Helsinki at the Haaga-Helia university we learned to work with three different prototypes: Warp VR, Matterport and Fectar. For the second language courses, Spanish in my case, I can see WARP VR and Matterport as the best fit.

With WARP we can create a VR video with a role play of Check-in, Service in a restaurant, Dealing with complaints and Saying no to guests. The video entails a complete dialogue in which the students will be the professional and they will see and hear the guest. They are guided through the dialogue step by step and via a multiple-choice format, they can select an answer. The correct answer can serve to practice finding the right tone of voice, the correct grammatical structure or vocabulary.

If they chose the correct answer, they continue with the dialogue. If they choose the wrong answer a coach pops up and gives them a clue to the correct answer and they will be automatically sent back to the previous question until they have selected the correct answer.

Matterport is an excellent tool to practice vocabulary. We can build a room, or part of a hotel or restaurant and implement all sorts of furniture or facilities of a real hotel or restaurant. Within this programme we can add links to websites to build on further knowledge.

At this moment we are working on finalizing the first part of a Check-in, the filming is done and it will be finalized within a few days.

The reason we haven't been able to finish it yet, is mostly lack of time. Due to busy schedules, there was no time to properly work with introducing VR in the courses.

In Block C and D there will be time, so we can test it with students and develop more role plays and different materials.

At this moment we are hoping to receive budget and support from school for further development. This is needed to properly develop material that can be used in all the second language courses in the future.

I see much more potential for introducing also augmented reality to let students experience being in a city of their future placement and truly experience the culture beforehand. There are many possibilities to create a rich and valuable curriculum for Second languages, but proper training and time to develop is crucial to make it a success.

The criteria for success of implementing VR in the second language curriculum, will be when students can really experience as if they are in a hotel or restaurant. This close to real life experience will help them to remember the vocabulary better and makes them better prepared for their internship. The second language courses are designed to prepare students for the internship. It can be a huge added value, since the students are first year students and have very little or no experience in the hospitality industry.