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Exploring Immersive Storytelling for a Post COVID-19 Tourism Industry

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Abstract. Beginning in 2015, a vocational training program was created for students of tourism and hospitality using virtual and augmented reality. This ongoing research in the power of immersive learning applied to vocational training in the tourism and hospitality industry has had a few milestones worth reporting to tourism education professionals. Due to the pandemic forcing this program to shift to more distance and asynchronous delivery, it has evolved into something that might be telling as to how the tourism industry is set to be disrupted by the proliferation of immersive technology like virtual and augmented reality.

Keywords: Immersive Tourism, My Hometown Project, Immersive Storytelling, Virtual Tours, Vocational Training

1 About the My Hometown Project

Starting in 2015, a pilot program was developed to explore the affordances of virtual reality for learning environments in higher education, starting with uses in tourism studies and language learning. Over several iterations many different tools and approaches were employed, resulting in many stages of development [1, 2]. Each stage looking to make what is most useful of previous designs and exploit those aspects in later iterations. The result now is a variety of more specific projects and programs, one of which is now called the 'My Hometown Project [3, 4, 5]. The early stages of this work began with using virtual reality as a tool to prepare students for guiding tourists in English to major tourism destinations in Japan [6,7,8]. Later stages began to develop software and curriculum to scale and deploy the program to larger and more diverse groups. The project is again growing to include students from many countries, different age groups, and starting to employ new practices in the design of virtual travel and international exchange in VR [9, 10, 11, 12, 13, 19].

1.1 In the Classroom and Face-to-face

Some of the first more full scale deployments of this project was as a part of a training program to prepare students of the Global Tourism Department at the Kyoto University of Foreign Studies [2, 3, 4, 14, 19]. The department had a volunteer program that got students to guide foreign tourists around key sightseeing spots around Kyoto. The program hit some major pedagogical points for the department including real world experience and the application of the English language in practical contexts. A 5-week module was designed to give students an opportunity to practice tour guiding in VR and learn some underlaying concepts for the task such as experience design and storytelling. Students responded enthusiastically to the training and some of the encouraging themes from previous learning designs were present as well, such as the reporting of connection and intimacy between participants. These findings were published, and a new iteration of the project was being prepared for deployment when the full force of a global pandemic forced drastic changes. These changes were not just to lack of in-person classes but the disappearance of tourist and tour operators in Kyoto [15, 16]. The program that was once an in-person onboarding for in person tour guiding found itself unable to meet in person and had no tourists to guide when the training was complete. Not only that, but some of the tools that were employed such as Google Tour Creator and Google Expeditions were announced to be sunset and would no longer be available. The program was forced to pivot quickly [17, 18].

Fig. 1. Students working on VR tours in tour guiding onboarding training.

1.2 Evolving to Face New Challenges

The challenges to the next iterations of this program were clear. The program needed to be deliverable at a distance and additions must be included to offset the absence of practical applications in tourism. This would seem at first glance good reason to employ a whole new approach or begin an entirely new set of learning activities [20]. But virtual reality and the potential it affords for this situation were unique and therefore were leaned into further for

the project. An online course was designed to give students most of the in-class lectures and activities from the previous version. Lessons about storytelling, basic graphic design, 360 photography, and case studies of VR in tourism were taught in self-paced modules that lasted 4 weeks [22, 23]. These modules have also been iterated on since with the goal of best facilitating students to make virtual tours of the highest quality. As most of the in-class work was peer and group work in giving and reviewing tours, this had to be designed into an online setting. For this a persistent virtual world was created, as sort of a gallery of VR tours [24]. This allowed students to browse and take tours but also facilitated that serendipitous meeting with course members and teachers [25, 26].

Fig. 2. Example of WebVR Tour Gallery.

1.3 Developing a platform for the My Hometown Project

One of other challenges of running a long-term program based on emerging technologies is the mortality of software and platforms. The main platform of choice to create, host, and share tours was Google Tour Creator and Google Expeditions. Both platforms went out of service in 2021 and were announced to be sunset in 2020. This has happened to me a couple of times before. New technology services using emerging tech like AR/VR often are shifting business models, are found un-sustainable, or the developers turn focus to something else. In 2015 I was developing some English language learning materials using augmented reality using software from a German company. Before deploying final stages of the research, the company was acquired by Apple and was unable to renew services for the remainder of the research. So, like in this instance, I was forced to put on my developer hat and get to work. It is much more costly, both in terms of time and cost to develop your own software for these purposes, but it is proving that it is the safer option. A platform for creating and sharing virtual tours was created. Later an interface to browse and take tours was added. It was then integrated into online learning courses.

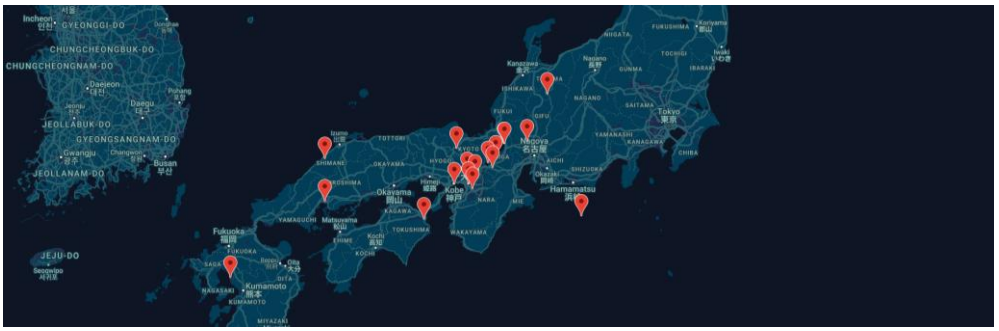

Fig. 3. My Hometown Project Interactive Tour Map.

2 Call for Collaborators

With students now joining from many countries and cultures, the project has begun to spawn several interesting new research questions based on virtual reality in travel. Most notably for the purpose of getting back some form of study aboard programs that have been highly restricted and still facing rising costs and other restrictions. This project is now iterating into a platform to facilitate international and cultural exchange though virtual travel. I would like to welcome participation of individuals, classes, and institutions to contact me about your possible involvement.

Fig. 2. Latest Online Materials for the My Hometown Project.

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