

# VR EU Hoteliers Project: Immersive virtual reality for higher education in hospitality and tourism

Milena Trenta<sup>1</sup>, Josué Gutiérrez Barroso<sup>2</sup>, Francisco Flores Muñoz<sup>3</sup>

<sup>1,2,3</sup> *Universidad de La Laguna, Spain*

## Abstract

The European VR EU Hoteliers project (Erasmus+ KA220-HED), developed by a consortium of five universities in the Czech Republic, Slovenia, Slovakia and Spain, seeks to innovate higher education in hospitality and tourism by creating an immersive virtual reality (VR) hotel model. The project's main objectives are to enhance the digital competence of students and teachers, eliminate barriers to accessing real facilities, enhance practical skills, and encourage inter-university and intercultural collaboration within compatible European programmes. The VR model comprises three key scenarios — a bar and restaurant, a professional kitchen, and hotel rooms — accompanied by educational modules with learning objectives, a bibliography, question banks, and discussion and reflection activities. The design, development and initial testing of these resources has been completed to date, and the pilot phase is currently underway at the partner universities. The Spanish pilot involved 25 students and 3 teachers, and the results show high overall satisfaction (M=4.45/5). Noteworthy aspects include the collaboration and inclusion fostered by the VR model, the development of professional skills and active problem-solving. VR is perceived as an effective addition to traditional teaching methods, providing safe access to realistic equipment and experiential learning. However, technical challenges (e.g. stability and interactivity) and areas for improvement (e.g. NPCs, gamification and contextual realism) were also identified within the model. Nevertheless, the project validates the use of immersive VR as a transformative tool in university tourism training. It recommends hybrid session designs, technical improvements and longitudinal evaluation to enable its use in other teaching programmes.

**Keywords:** VR model; Erasmus+; Europe; teaching innovation; university programmes