**Abstract of dissertation project. Candidate: Ilaria Compagnoni**
**Title: An investigation on students' positive interdependence in learning Italian as a**
**foreign language with Virtual Reality**
**Supervisor: Prof. Graziano Serragiotto. Co-Supervisor: Prof. Anja Zorman**

Central to this research inquiry is the assumption that a key element of language learning is positive interdependence, which is defined as a situation where individuals establish relationships of mutual reliance for the purpose of achieving common goals (Johnson & Johnson, 2005). In fact, in language educational contexts, positive interdependence is vital for cooperation and dependent on students' engagement and motivation. Both aspects have been tremendously challenged by remote language learning and related deprivation of in-person interactions. In response to this issue, this research aims at exploring whether virtual environments can provide technology-enhanced learning experiences fostering positive interdependence with the use of Virtual Reality (VR) surfacing amongst students as interaction and mediation strategies, as well as linguistic manifestations of subjunctive and conditional verb forms. A case study on students of Italian as a Foreign Language (FL) will be used to investigate the following research questions:

- RQ1: What are the effects of VR-learning spaces on students' positive interdependence surfacing as mediation strategies?
- RQ2: What are the effects of VR on the acquisition of Italian subjunctive and conditional moods?

To investigate these research questions, a mixed-methods design combining questionnaires, observations and focus group interviews will be used (Baldry, 2005; Dörnyei, 2007). Data will be gathered by delivering to groups of students of Italian as a FL virtual and in-person activities planned according to a task-based methodology (Willis, 1996). In the activities, students will design digital tours of the Italian city of Siena in immersive VR experiences, accessed via Oculus Quest 2 headsets. The study will involve non-native Italian speakers with an intermediate level of proficiency and be conducted at the LabVR of the University of Siena between October and December 2022.

It is hoped that this research will give indications of using VR to heighten positive interdependence amongst language students. It may also cast light on whether VR environments can influence the acquisition of grammar forms related to interdependent communicative acts amongst students involved in immersive task-based experiences. Additional findings may include an increase in students' communication and technological skills that meet the needs of an increasingly digital professional and social world. Moreover, this research could help identifying potential developments in blended language education combining VR technologies with real-life interactions, suggesting new methodological approaches for future language educational practices.

## References
Baldry, A., (2005). *Focus group in azione. L'utilizzo in campo educativo e psicosociale*. Roma: Carocci Editore.
Bales, R. F. (1950). *Interaction process analysis; a method for the study of small groups*. Addison-Wesley.
Dörnyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*, O.U.P. Oxford.
Johnson, D. W., & Johnson, R.T. (2005). New Developments in Social Interdependence Theory. *Gender, Social, and General Psychology Monographs, 131*(4), 285-358. doi: https://doi.org/10.3200/MONO.131.4.285-358
Willis, J., (1996). *A Framework for Task-Based Learning*. Edinburgh: Addison Wesley Longman Limited.