

Chapter 12

Comparing Two Teacher Training Courses for 3D Game-Based Learning: Feedback From Trainee Teachers

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ABSTRACT

This chapter explores data from two online language teacher training courses aimed at providing participants with the skills to create and use games in 3D immersive environments. Arising from a two-year project which explored how game-based learning and virtual learning environments can be used as digital tools to develop collaborative and creative learning environments, two training courses were developed to support teachers to use two immersive environments (Minecraft and OpenSim). The first course was self-directed and the second was moderated by facilitators. Both courses provided a variety of games and resources for students and teachers in different languages (English, German, Italian, and Turkish). This chapter explores feedback from the teacher participants on both courses arising from a questionnaire and interviews with teachers and provides recommendations about the technical and pedagogical support required to develop immersive worlds and games for language learning.

INTRODUCTION

As computer-assisted language learning (CALL) has often been driven by technological innovation rather than pedagogy, a constantly recurring finding has been the need for more research on the effectiveness of CALL teacher training that aims to integrate technological and pedagogical literacies (Torsani, 2015). This chapter contributes to this gap in the research by investigating two online language teacher train-

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ing courses, and is significant in that it examines the teacher feedback on the potential of digital game-based learning in two 3D immersive environments (Minecraft and OpenSim). In particular the chapter contributes to the knowledge base in this area by critically exploring the potential of immersive training for teachers who use the CLIL (Content and Integrated Language Learning) approach in two different formats: a self-study course and a teacher-led training course. The main difference between the courses was that the self-study course provided a theoretical framework for games design without the need for participants to develop technical skills to build games themselves. In the teacher-led course the participants' goal was to design and create a language learning game in a virtual world. The two courses were designed as part of a two-year research project exploring game-based language learning funded by the European Commission, and included participating teachers from Italy, the UK, Germany and Turkey.

The chapter first briefly summarizes relevant research literature before describing the rationale, aims and scenarios that informed the planning and implementation of the two courses as examples of continuing professional development (CPD) for teachers in immersive worlds. The research was guided by the following two research questions which led to a mixed methods research design involving interviews, an online questionnaire and participants' self-reflections:

1. How beneficial and effective is CPD on game-based learning and immersive worlds for foreign language teachers?
2. What are foreign language teachers' perceptions of being trained in a community of practice (CoP) in an immersive world?

Background

The use of digital games in different contexts has become increasingly popular over the last decade. Industry and educational professionals are regularly using digital games to foster users' motivation and engagement, as confirmed by Johnson et al. (2013), who argued that "game play has traversed the realm of recreation and has infiltrated the worlds of commerce, productivity, and education, proving to be a useful training and motivation tool" (p. 21). Research has shown that games play a crucial role when it comes to education but it is important to reiterate that several categories and concepts have overlapping boundaries and they are not always clearly defined. Several authors, for example, use the terms gamification and game-based learning to describe the same concept (Callaghan, McCusker, Losada, Harkin & Wilson 2013). In order to bring more clarity to this fast changing landscape, in this chapter we define gamification in terms of a style of competitive learning related to the integration of 'game mechanics' such as badges, points, levels and leaderboards to non-game situations (Hamari, Koivisto & Sarsa 2014; Seaborn & Fels 2015) and game-based learning as the use of specifically designed games that have pedagogical or training content added to them along with defined learning outcomes (Van Eck, 2006). Game-based learning and gamification have become particularly popular in primary and secondary school contexts, thus the need for more effective and flexible modes of pre- and in-service teacher training to develop and sustain teacher competences in this rapidly moving area (Wiggins, 2016).

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