

Chapter 2

Framework for 3D Task Design: An Immersive Approach

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ABSTRACT

This chapter introduces a framework for the 3D task design. The framework proposes that the process of designing language learning tasks for 3D immersive simulated environments also be immersive. The framework guides designers/teachers who are new to 3D worlds through 10 stages of the design process that incorporates designers/teachers' individual work and their collaboration with colleagues and learners. Following Breen's advice, collaboration with colleagues and learners allows for taking into account some possible interpretations of the tasks to help learners interpret the task as closely as possible to its original plan; it also improves task functionality. Developed for designing 3D language learning tasks, this framework also benefits other disciplines and informs the design of tasks implemented in other virtual environments.

INTRODUCTION

This chapter proposes a process-based conceptual framework for the design of 3D language-learning tasks implemented in 3D virtual environments, also known as virtual worlds, e.g., Second Life, AvayaLive™ Engage, VirBELA. The 3D worlds are multimodal collaborative environments that provide participants with simulated real-life experiences by embodying participants in graphical avatars situated in contexts resembling real-life geographical locations (Cooke-Plagwitz, 2008; Gerhard et al., 2004; Peterson, 2011). Since participants can interact through several communication channels and explore the world around them with others, they can be engaged in “experiential problem solving and complex and spatially distributed forms of collaboration” (Cornille et al., 2012, p. 245).

Task-based learning and teaching (TBLT) has been widely explored both in face-to-face (f2f) and online contexts with an abundance of studies addressing task design (see Breen, 2009; Collentine, 2011; Ellis, 2003, 2009; Ellis et al., 2020; Gánem-Gutiérrez, 2014; González-Lloret & Ortega, 2014; Hartwick & Savaskan Nowlan, 2018; Kozlova, 2018a, 2018b; Kozlova & Priven, 2015; Lan et al., 2016;

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Lin et al., 2014; Nunan, 2004; Pica et al., 1993; Willis & Willis, 2007 among others). The literature on technology-mediated TBLT acknowledges the fact that technology affects the design of online tasks (e.g., Collentine, 2011; Gánem-Gutiérrez, 2014; González-Lloret & Ortega, 2014; Kozlova, 2018a, 2018b; Lan et al., 2016), but so far, a step-by-step process of task design has only been addressed in Kozlova and Priven (2015).

Kozlova and Priven (2015) show that 3D task design is rather complex because task designers must understand task-based pedagogy and the second language development processes that occur in learners, as well as the following: (1) the purpose and affordances of the 3D environment; (2) the purpose and use of tools embedded in the environment (e.g., voice- and text-based chat, collaboration boards); (3) how 3D technology can be integrated into the task design to facilitate language learning; (4) pedagogical practices appropriate for teaching in this environment; (5) how the geography and space of the immersive environment contribute to the task design; and (6) how learner interaction with the space facilitates learners' language development.

Kozlova and Priven (2015) also demonstrate that it is near impossible to use tasks designed for f2f classrooms in 3D contexts because 3D virtual environments “create learning spaces conceptually different from the face-to-face classroom and web-conferencing environments” (p. 83) by taking learners outside the classroom context and immersing them in a simulated real-life-like world. Since 3D environments are immersive and provide learners and teachers with immersive experiences, *the process of designing tasks should also be immersive*. Teachers who start working with 3D environments may be familiar with the TBLT approach but may *not* be familiar with the immersive approach to 3D task design, which can make for a challenging experience. This chapter provides a background of concepts for (technology-mediated) tasks and task design and introduces a framework for the process-based immersive model of 3D task design. Although this model is based on research on task-based learning in 3D environments, it can be extended and applied to designing tasks for other virtual contexts.

BACKGROUND

By definition (see Breen, 2009; Ellis, 2003, 2009; Ellis et al., 2020; González-Lloret & Ortega, 2014; Nunan, 2004; Pica et al., 1993; Willis & Willis, 2007 among others), tasks are goal-oriented activities with a clear task outcome (e.g., making a shopping list). Although the primary focus is on meaning, learners are to use their linguistic resources and pay attention to form to express meaning. The target forms required by the task may not be explicitly stated, but tasks can be designed to coerce learners to employ them, for example, by requiring learners to use prepositions to describe a room or use the simple past to describe a recent trip. Tasks include some kind of an information gap or a problem, which pushes learners to produce authentic and spontaneous language while attempting to recover the missing information or solve a problem. As learners interact with linguistic input, negotiate meaning and/or form, perform interactional modifications, and scaffold each other, they engage in second language acquisition (SLA) processes that facilitate language learning.

Components of Task Design

While task design has been widely addressed in the literature for both f2f and virtual contexts (e.g., Ellis, 2003; Ellis et al., 2020; González-Lloret & Orgega, 2014; Hampel, 2006, 2010; Nunan, 2004; Robinson,

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