Chapter 4  
Learning Assignments in Virtual Worlds: Theoretical Systematization and Didactical Requirements

Tanja Adamus  
University Duisburg-Essen, Germany

Nadine Ojstersek  
University Duisburg-Essen, Germany

Axel Nattland  
University Duisburg-Essen, Germany

Michael Kerres  
University Duisburg-Essen, Germany

ABSTRACT

The chapter describes different possibilities for the design of learning assignments in virtual worlds with a special emphasis on Second Life. For this purpose, it relates to didactical requirements to obtain criteria for constructing learning assignments for different contexts and conditions. A difference has to be made between distinct forms of simple and complex learning assignments, which have to be solved in the virtual worlds, but serve for the attainment of learning objectives either from the real or the virtual world. Furthermore, it is possible to reach learning objectives concerning the virtual world by means of the real world. It becomes obvious, that the bounds between virtual worlds and the real world are blurring. The decision, whether learning assignments should be edited in virtual worlds, depends on to what extent an additional benefit compared with other (technical) solutions, can emerge in these contexts. For these purposes a closer consideration of virtual worlds’ specific features becomes relevant.

DOI: 10.4018/978-1-61692-825-4.ch004
INTRODUCTION

The capabilities of virtual worlds for teaching and learning are of particular interest and can be explained by the associated hope for new potentials of e-learning. The focus is on the possibility for learners to create their own avatars, to explore the virtual worlds and the facilities to communicate and collaborate with others. This chapter will describe different types of learning assignments in virtual worlds with a special emphasis on Second Life and discuss the possibilities, which are offered here to design learning assignments taking advantage of the virtual world’s full potential. Having illustrated the essential functions of learning assignments and the specific features of virtual worlds, we will subsequently explicate examples of simple and complex tasks. Finally, this article will demonstrate how the dividing line between real life and virtual worlds is blurring. By means of examples we will identify the prerequisites for the attainment of learning objectives either from the real world or virtual worlds via the adaptation of learning assignments.

BACKGROUND

In order to systemize the different possibilities and requirements for the design of learning assignments (e.g. appeal to the learners’ emotions) in virtual worlds which ensure successful learning, their essential functions will be defined first. Afterwards, we will discuss the specific features of virtual worlds, which have to be considered for the design of learning assignments.

Functions and Didactical Requirements of Learning Assignments

A didactical preparation of the content does not suffice to ensure successful learning. Assignments encourage learners to examine learning contents, whereby learning processes are invoked. To what extent this attempt is successful depends on various factors as for example whether tasks should be solved alone or by working in groups, the type of assignment, the support or the feedback provided. Thus it is necessary to prepare a close matching with the contextual focus before designing a learning assignment. Previously, there are some fundamental questions which have to be considered as for example: What are the learning objectives? Do learners define their own objectives? What basic conditions (characteristics of the target group, external respectively institutional conditions) must be regarded? The answers to these questions are the basis for the design of learning assignments.

Learning assignments in media-supported learning environments have two main functions: to ensure and to activate learning processes (Petschenka, Ojstersek & Kerres, 2004). Referring to learning in virtual worlds, this claim implies that assignments have to be designed in a way, which requires more from the learner than just transiting a learning path superficially or clicking (interactive) objects randomly. Learning-/teaching processes are not automatically improved by the use of virtual worlds.

Learning processes can be encouraged by the use of virtual worlds, but to assure them is certainly a requirement for learning assignments. Instead of securing a learning process which already occurred, the main objective in this context is to inspire the actual learning processes by the use of adequate assignments. They invoke the learning processes themselves by stimulating the necessary cognitive operations as for example reflections on the learning objects as well as appealing to the learners’ emotions and motivations. This instance occurs particularly when learners recognize a reference to their living environment and if the assignment’s relevance is directly recognizable for them.

Furthermore learning assignments can encourage social interactions among the learners,
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