

# Chapter 6

## Teaching Economics in World of Warcraft

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### ABSTRACT

*This chapter is a go-to guide for education professionals (primarily in the undergraduate and graduate college-level degree programs) for understanding and designing Economics classes in World of Warcraft. The premier MMORPG of the Western world, World of Warcraft boasts a number of features that makes it an ideal sandbox for economic education. It was deliberately designed to represent a large number of important real-world institutions like trade, production, cooperation, thus it can become a platform for learning about them. Moreover, since students encounter these institutions in a vibrant virtual world setting, they not only get to verify the learned materials but can practice their applications in their day-to-day dealings with other World of Warcraft denizens. This will lead to more student engagement, better learning outcomes, a more thorough understanding of both the principles of the theory and their applications, and greatly improved knowledge retention.*

### INTRODUCTION

Virtual worlds, or synthetic worlds (Castronova, 2005) are computer-based simulated environments that can be navigated by a participant (in a gaming context, referred to as a player). While the aim and purpose of these environments vary widely, all share the exploration of a different reality. The multi-user versions of virtual gaming worlds were developed as early as 1973 when Maze War, the forefather of the genre became available through the Advanced Research Project Agency Network (ARPANET – the predecessor of the Internet). The current iteration of the gaming genre is termed Massively Multi-Player On-line Role-Playing Games (MMORPGs).

Modern virtual worlds are nearly exclusively graphical, and most of them represent a three-dimensional (3D) space<sup>1</sup>. Players negotiate this environment via the use of a virtual representation called an avatar. The avatars move like a person; the immersive feedback a player receives is the actual movement of their avatar within the virtual world. To explore the virtual world, players have to guide their avatars as

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if they themselves were exploring; for example, walking through forests, swimming across lakes, entering houses, mapping caves. Certain virtual worlds implement transportation vehicles like cars, planes, helicopters, horses. Depending on the virtual world used, superhuman navigation options are also available, usually in the form of flight or teleportation.

Virtual worlds are also frequently *themed*. For example, one of the first successful MMORPGs, *Ultima Online*, was built on the existing mythology of the sword-and-sorcery themed *Ultima* games series. *EverQuest*, a product developed by Sony Corporation, also focused on the sword-and-sorcery theme. Current popular game titles such as *GuildWars* and *World of Warcraft* are also set in sword-and-sorcery Tolkienesque worlds. Another popular meta-theme is science fiction; *Anarchy Online* or the cult classic *Eve Online* are examples. Some virtual worlds combine science fiction with sword and sorcery fantasy themes, such as *Star Wars: The Old Republic* and *Wildstar*. There are also theme-less worlds. *Second Life*, developed by Linden Lab, famously provides only a sand-box environment, and participants are given powerful tools to generate virtual objects. The 3D virtual world of gaming has become so popular that it is being used for educational purposes.

This chapter will provide an in-depth examination of the MMORPG *World of Warcraft*, discuss the use of virtual environments in education, compare the *World of Warcraft* with principles of economics, and identify steps to implementing a virtual environment, such as *World of Warcraft*, into an introductory economics college course.

## EDUCATION IN VIRTUAL WORLDS

Using real-world examples in an undergraduate college program frequently is pointless, as the students are usually inexperienced in the real world. It is not helpful for them to explain that understanding the elasticity of the demand curve will help them formulate the long-term pricing strategy of aluminum, as they have never faced the problem of being responsible for the long-term pricing strategy of aluminum. Social sciences attempt to explain and simplify the complex reality – but these simplifying models themselves are hard to understand without a point of reference. In graduate programs we can assume a working understanding of certain social institutions, and can base our lectures on that; but in the undergraduate setting this is not always realistic. The construction of virtual worlds can bridge this knowledge gap: using the familiar virtual setting, the teacher can introduce both the real-world problem, and the social science model designed to help deal with the problem.

### The Knowledge Transmission Mechanism When Using Virtual Worlds for Education

According to Nick Yee (2006), virtual gaming world players can be grouped into three broad categories in relation to their motivation: *achievement*, *social*, and *immersion*. The achievement motivation group encompasses progress, accumulation of power, overcoming challenges both in-game and out-of-game (understanding underlying mechanics, optimization etc.). The social motivation group contains factors like making friends, casual chatting and collaboration. The immersion motivation group contained the joy of discovery, role-playing and escapism, among other factors. It is also important to emphasize that the three motivational groups were not exclusive – they were mostly unrelated.

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