Chapter 1
Overcoming Objections to MUVEs in Education

Daniel Laughlin
University of Maryland Baltimore County, USA

ABSTRACT

This chapter addresses some of the objections to the use of multi user virtual environments (MUVEs) in education that proponents of that medium are likely to encounter. Selection of the objections on the MUVEs literature and the author's experience championing MUVEs as education tools within a government agency. Many of the objections apply broadly to MUVEs of both game and non-game varieties. The goal of this chapter is to help the reader overcome the arguments raised by others to build support for the use of MUVEs. Some guidance is also given for an approach to overcome objections based on mental model theory.

INTRODUCTION

It is human nature to be resistant to significant change. The brain has powerful tools that come into play to protect existing beliefs and practices both consciously and subconsciously. In their work on the persistence of beliefs, Lord, Ross and Lepper (1979) cataloged a number of common techniques that people use to protect exist beliefs against evidence that contradicts them. They label this process assimilation bias. Among the tools that enable assimilation bias are discounting information as non-credible, rejecting research that contradicts existing beliefs and inaccurately interpreting evidence as supportive. Inevitably, when significant changes are proposed for education, they provoke these kinds of resistant responses from those with strong pre-existing beliefs about education. A multi user virtual environment (MUVE) by its very nature is an innovative and significant change, and thus likely to encounter resistance when being proposed for educational use.

The contents of this chapter are based on the author's experience working with a federal agency's office of education for the better part of a decade. That NASA is currently working

DOI: 10.4018/978-1-61692-822-3.ch001

in MUVEs and is sponsoring development of a massively multiplayer online game to foster science, technology, engineering and mathematics learning and career exploration is due in no small part to the arguments presented here. This chapter is intended to be an aid to the reader who has a desire to use a MUVE for education and who needs the support of others to achieve that goal. Whether the people who need to buy in to the plan are administrators, students, parents or colleagues, there are likely to be objections that need to be overcome. This book is full of good examples of uses of MUVEs for educational purposes. There are cases of best practices and reports on the application of MUVEs in other chapters. It is not the purpose of this chapter to convince the reader that a MUVE can be a useful tool for education. The goal of this chapter is to help prepare the reader to overcome external objections to using MUVEs in the classroom. It proceeds from the assumption that the reader already supports such use and is seeking the means to convince others of the value of that course.

BACKGROUND

The rapid growth of personal computer ownership and access in the last two decades of the twentieth century led to many efforts to bring computers into schools and to innovated education with technology. Computer labs became a standard feature in almost every school and personal computers appeared in many classrooms and homes as teachers, administrators and parents in with schoolwork at home. While applications like word process, email and spreadsheets drove business and schools to buy computers, the purchase of many home computers included "and to play games" on the list of justifications. Demand for gaming on computers helped drive the development of greater processing power and better graphics capabilities. While schools tended to focus on business-type applications, a growing population of gamers was demanding and paying for greater power and speed and better visual experiences from their computers at home. Through the 1980s and 90s, graphics moved from monochrome to 16 (CGA) then 64 (EGA) then 256 (VGA) and eventually reach more than 16 million (Truecolor) colors. Game rendering technology advanced from 2D to 2.5D to 3D by the late 1990s.

The first online, shared computer environment was a text-based, fantasy realm called MUD standing multi-user dungeon (Bartle, 1999). It was written at the University of Essex in 1978, and was run on the university mainframe until 1987. It was an adventure game of the swords and sorcery type. What made it different from other games at the time was that people could play together online, and that opened new possibilities for online social interaction and community building (Rheingold, 1993). Other text-based, multi-user environments followed using the term MUD and later MOO, and some are still available. Sometimes the term multi user virtual environment is used for these text-based programs, but often MUVE is reserved for the graphically-based virtual worlds that grew out of the merger of the MUD idea with the increased computer power previously noted. Today there are dozens of MUVEs available. Some of them are massively multiplayer online games (MMOG) like *World of Warcraft*. Others are not games at all, but shared environments like *Second Life* without scoring, missions, character classes or other structure features common to games. Often the distinction between games and non-games is hard to make even for those familiar with MUVEs. There is also a lack of consensus about both definitions and terms that further hinders discussion and research.

Usually at this point in the background material a well defined body of literature can be identified as a solid starting point for the work presented. This chapter is about making a persuasive case for the use of MUVEs in education. There is not a convenient body of literature neatly pulling together the obstacles the proponent of MUVEs is likely to