

Chapter 17

The Way Ahead for Serious Games

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INTRODUCTION

Despite the fact that people have been playing games since before recorded history, the field of *Serious Games*—as a scientifically valid and viable area of investigation and application—is really in its infancy. In fact, the rise in availability and popularity of video games is a relatively recent phenomenon and actual applications of video game technology to serious pursuits are relatively rare. That said, I believe that Serious Games are coming into their own, and predict that the next few years will witness an explosion of new games, design features and guidelines, success stories, and scientific findings regarding their effectiveness. How quickly and fruitfully this happens depends, in part, on how well

the community of researchers, designers, developers, evaluators, and end users can come together to systematically conceive of, and deploy games for serious purposes. Haphazard attempts—i.e., those that do not build on the findings of others' experiences—will retard the speed at which viable games are consistently produced. Likewise, rigorous evaluation of those games that are developed cannot be neglected or future developers will likely fall prey to the same problems and pitfalls as their predecessors.

This vision of a unified field of Serious Games may be far off, but I think that there are several precursors (or enablers) that the field can work on now as a means to effectively evolve. These include: working towards common definitions and a common language for describing Serious Games; adopting an overarching framework in which the various types

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Table 1. Serious Game Labels (adapted from Sawyer & Smith, 2008)

Alternative Labels for Serious Games	
Educational Games	Digital Game-Based Learning
Learning Games	Immersive Learning
Training Games	Simulations
Games for Health	Social Impact Games
Health Games	Persuasive Games
Simulation/Simulators	Games for Change
Virtual Reality	Synthetic Learning Environments
Virtual Worlds	Game-Based “X”
Alternative Purpose Games	Games for Good

of Serious Games can be organized as a means to establish commonalities and differences in various applications; and identifying challenges and barriers to development and implementation of Serious Games early so that these can be confronted and dealt with before they can impede progress. In the following sections, I address these issues and outline what I believe are the challenges in developing Serious Games and ultimately in creating a viable field of study.

DEFINITIONS

Clearly, a unified field of Serious Games is not possible until an agreement can be reached about how Serious Games are defined. According to Sawyer and Smith (2008), there is a tendency to equate Serious Games with those devoted to learning or training, but they strongly disagree with this position. Instead, they list a variety of labels that have been used to describe different types of Serious Games (I’ve added a few to the original list); see Table 1.

The problem with this group of labels is that many are used to refer to the same type of game (i.e., that have a common goal). For example, some people use the term “educational game” while others may use “immersive learning environment,” but mean the same thing. Alternatively, lumping together all games that have some kind of learning as their objective and calling them “learning games” is probably not meaningful

since there may be very different applications within this space.

As an alternative to this loose collection of labels, Smith and Sawyer (2008) contend that what is needed in the field is a better way to define and discuss the various kinds of games that have been produced or that can be conceived.

Addressing first the definition issue, my preferred definition would be: *Serious Games are games that are not exclusively designed for entertainment purposes* (A. Smith, personal communication, July 2009). This definition is broad enough to cover the scope of possible applications (i.e., any purpose besides purely entertainment) and also allows for the fact that some games may have a serious as well as entertainment component (hence the phrase “not exclusively”). However, since the definition is so broad, it does not reflect or indicate the types of games that are part of the Serious Game space. For this reason, Sawyer and Smith (2008) provided a taxonomy of games (based on their usage); this is described next.

USES OF GAMES: A TAXONOMY

The taxonomy provided by Sawyer and Smith (2008) addresses the definitional issues discussed above and demonstrates the breadth and diversity of Serious Game applications being conceived. According to these authors, a taxonomy is necessary for several reasons, including: creating a shared mental model for those involved in Serious

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