

Foreword

Considering all the different media (including books, photographs, audio recordings, film, and video) that have been used in education, it seems strange to think that there would be any resistance to using video games as an educational tool. Those who object that video games are only for play or for fun seem to presume that learning cannot be playful or fun. Or that video games cannot be mentally taxing; some games are now complicated enough to have learning curves steep enough to require a good amount of effort to learn. Other games contain puzzles and problem-solving more difficult than any school-based lesson is likely to be. In any event, the video game (which itself can contain text, audio, and video within it) is extremely well-suited for educational purposes, as the *Handbook of Research on Effective Electronic Gaming in Education* demonstrates. There have been other books on the subject, to be sure, but not to this extent, covering so many topics and angles, and with such a variety of views and approaches to the subject.

While asking how video games can be used in education, we might also ask in what ways are teaching and learning game-like? One shared aspect of teaching and learning and video games is interaction (an advantage video games have over older media). But there are many other shared concepts: animation, simulation, speculation, repetition, variation, imitation, emulation, and integration. Video games can animate, or bring to life, subjects the way a good teacher can, making them engaging in a very literal way. Simulation put theory into action, and lets players try out a system to see how it works, and perhaps as importantly, how it does not work. Through trial and error, players use repetition, variation, and even speculation to figure out how to work with a system, whether they are running a simulated city or world civilization, or trying to make their lemonade stand more profitable. They may learn by imitation and emulation, and be forced to integrate their knowledge into larger schemata. Scoring is also present in both video games and academia, and it is interesting to note the difference in attitude the same student may have toward attaining high scores in each of them.

Naturally, some educators will still want to wait until research supports the use of video games in education. And that's another way this book is a valuable addition to the education field as well as that of video game studies. The breadth of topics and range of applications discussed should quell the qualms of the most wary educator, dispelling any doubts as to the value of video games as an educational tool, and even as a tool for researchers. With education in mind as the goal, designers of educational video games will inevitably break new ground in both education and game design, as their potential is explored. The medium of the video game is still a young medium, and even now we have yet to see all it can do. Computers have certainly spread into areas that people 40 years ago would never have expected them to go; and wherever computers go, video games can follow. And this book attempts to map out some of those possibilities.

As the importance of education and the popularity of video games continue to grow, this book only increases in relevance. As more of the world moves online, and new worlds appear online, and computer-

driven screens mediate so much of what we do, it is imperative that we reach a better understanding of the effects of these technologies, and then use that knowledge to consciously aim them toward good and useful ends. While it may sound somewhat grandiose stated in this fashion, what we think of as video games is to some degree quickly becoming the model for all mediated interactivity, and the research appearing in this book may well have even a broader application than what we can envision today. Future researchers, educators, and game designers will be able to make use of, and build upon, what is presented here. The firmer the foundation, the higher you can build upon it; and this book provides us with a very firm foundation indeed.

Mark J. P. Wolf
Concordia University Wisconsin, USA
May 2008