Chapter 10
The Design of a Health Literacy Game: Face the Case

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ABSTRACT

This chapter describes the design and development of a game that was created to teach undergraduate students concepts related to health literacy. A brief discussion of the nature of games and how and why they appeal to college students is followed by a synopsis of some of the literature that influenced the design of the game in 2005. The chapter goes on to describe the game in detail, including the learning objectives, gameplay elements, design challenges, and skills included. The chapter will conclude with a discussion of some evaluations that were done on the game and direction for future development.

BACKGROUND

This chapter describes the design and development of a game created to teach pre-professional health and nursing students about the health literacy challenges facing their future patients and clients. The purpose of the game is not to improve the health literacy of the player; rather the goal of the game is to educate players about the ways in which compromised health literacy affects people and to expose the players to strategies for working through the barriers that compromised health literacy places between patients and effective health care.

For the purposes of the game and this chapter, the definition of health literacy is “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services and make appropriate health decisions.” (National Library of Medicine, 2000).

While the amount of information available on the Internet has in some ways leveled the playing field for consumers of information, it has been a mixed blessing. Consumers using the Internet to research health conditions are deluged with information that varies wildly in credibility, objectivity, reading level, and usability. When seeking health care these same consumers are expected by health care practitioners to play a specific part in the...
treatment. They are expected to be literate, to have math skills, to have reasoning abilities, and to have cultural beliefs that make them compliant with instructions delivered by practitioners. However, the diversity in literacy, socio-economic status, religious and cultural beliefs and cultural practices makes it impossible for all consumers to experience the same level of care. Health care practitioners and social service providers have an obligation to assess their clients’ health literacy and address barriers they face to receiving health care that is often designed as “one size fits all”. It is this assessment and identification of barriers that the game was designed to address.

The concept of health literacy is one that has received a good deal of attention from both public and private funding agencies. The game that this chapter describes was funded by a National Leadership Grant from the Institute for Museum and Library Services. The impetus for creating the game was a request from the then-director of the JMU based Institute for Innovation in Health & Human Services. Initially a tutorial was requested that would help pre-professional health students understand health literacy. However, because the students who made up the potential players and their backgrounds were so diverse, a decision was made to create a game rather than a tutorial. This decision required a major shift in how “instruction” was approached as well as the kinds of resources required to create the game. The then-current work of Diana Oblinger and Marc Prensky influenced this decision.

INFLUENTIAL LITERATURE

The design of Face the Case (FTC) was more a creative endeavor than a work of research; therefore design choices were influenced more by playing games than by a formal review of the literature. There are several writers and scholars, however, whose work influences contemporary thinking about the creation of educational games. Marc Prensky, author of Digital Game Based Learning, initially suggested that games needed six structural elements in order to be considered a game. Prensky’s elements are rules, goals and objectives, outcomes and feedback, conflict/competition/challenge/opposition, interaction, and representation or story (Prensky, 2001). These elements were used, in unequal measure, to guide design decisions related to Face the Case. While Prensky’s ideas provided insight into the design of games that can be used in educational settings, it should be noted that he has been heard to say that trying to design learning into a game “sucks the fun out of it.” His central dogma relates to the idea that we can learn from games and the way that they engage students, but that as soon as educators try to design games that intentionally teach anything, they cease to be games and become dressed up tutorials. Prensky’s devil’s advocate style, while decidedly unscholarly, served as an important warning throughout the design of Face the Case.

The work of James Paul Gee was also influential in many design decisions related to Face The Case. Gee heads the Games and Professional Practice Simulations program at the University of Wisconsin, and is the author of the influential work What Video Games Have to Teach us About Learning and Literacy. In his various writings Gee argued that well designed video games illuminate the fact that humans enjoy learning. Games excel at encouraging players to engage in the process of knowledge creation in ways that traditional educational methods do not. For example, Gee argues that games can encourage risk taking, interaction, and relationship building in a safe way that appeals to players’ senses of fun (Gee, 2005). The challenge Gee considers paramount to educators today is how to make learning more game-like.

Several of the design decisions in Face The Case were directly influenced by Gee’s learning principles. The self knowledge principle was used in making decisions about the game world and