Best Practices for the Design and Development of Ethical Learning Video Games

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ABSTRACT

This article builds upon earlier research (McDaniel & Fiore, 2010) in which the authors presented case studies focused on the design and development of two original ethical learning video games. Through this case study and a review of relevant literature, the authors explored the content creation of, and theoretical rationale for, the design and development of ethics games. Both games were geared toward an undergraduate student audience as casual learning games to be completed in a few hours of gameplay. To update and expand this original work, the authors reviewed contemporary research on identity, cognition, and self in relation to video game environments as well as literature dealing more specifically with ethics and video games. From this literature base and their applied design experiences, the authors offer ten guidelines as best practices to follow for aspiring ethics game developers.

Keywords: Best Practices, Case Study, Design, Development, Ethics, Guidelines, Identity, Lessons Learned, Production, Self, Video Games

INTRODUCTION

Designing games for education presents a number of challenges arising from the need to seamlessly incorporate learning content into an engaging interactive experience. While this is difficult enough for any type of learning content, such as science or mathematics, designing games for teaching about ethics is in some ways more complex. In many cases this is due to the inherent ambiguity that arises when there are not necessarily “right” or “wrong” answers and responses can be largely contextual and based on personal value systems as well as situational factors. Such is the challenge associated with the question of learning in applied ethics, a field attempting to more directly address social problems from a moral standpoint via the philosophical method (e.g., Bayertz, 2003). These challenges motivate our chapter, and we use them as a stepping off point for the following set of questions devised to help bound the complexity inherent in developing games for applied ethics:

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• What types of design approaches are most useful for teaching or exploring ethical content?
• How does one begin the task of designing an applied ethics game with limited resources?
• Is it better to start with a strong story, a capable technology base, or fun and interesting gameplay mechanics?
• Do the core gameplay ideas come from existing ethical scenarios that can be translated into a more interactive form?
• Should ethics games use pre-developed scripts, or include some mechanism for players to author their own ethical scenarios based on issues from their own lives?
• How can we conceptualize the notion of player identity so that actions and behaviors in the virtual domain are also useful in the real world?

In this chapter we recount the lessons learned from our own experiences in building two different types of ethics game projects to explore these questions. We offer these experiences with the hope they will provide useful information and best practices for other ethics game designers in various stages of conceptualization and development. Before exploring our case studies, we present an argument for games as useful vehicles for teaching ethics.

BACKGROUND: A BRIEF ARGUMENT FOR APPLIED ETHICS GAMES

The idea that computer games can be viable tools for learning has been discussed for several decades, starting with the often-cited work of Malone (1981) and his research with game variants and intrinsically motivating game features. Since then, games have progressed rapidly into forms that are very different from those studied by the pioneering video games researchers in the 1980s. Modern games—from role-playing games to first-person shooters—now offer a much more visceral and immediate experience for the player, especially in light of the new affordances allowed by the first-person or third-person perspective. For example, Dickey (2005) writes, “the shift from an outside orthographic perspective to a first-person agent embedded in the game space marks a shift in moving the player from outside of the game into becoming part of the gaming environment” (p. 71). Similarly, Fosheim, Larsen, and Sageng (2012) note the ability of games to cognitively transport our bodies on screen using avatars, enabling what they describe as “remotely controlled proxies” (p. 30) that extend and transform our notions of physical awareness to a new virtual environment.

From this quality of games that allows for the manipulation of perspective and the formation of virtual identities through on screen avatars, it is plausible that games with ethical dimensions are likely to be useful and engaging tools for exploring ethical scenarios and dilemmas. After all, what better place to experiment with ethics than in an environment where wounds can be magically healed, relationships can be painlessly restored, and characters can be killed or brought back to life at will? Such immateriality and flexibility presents a number of interesting possibilities for experimenting with decision making in morally complex scenarios.

If we accept this premise of games as fertile territory for experimenting with moral decision making, we must then define those moments of gameplay that we would consider to be useful for such experimentation. After all, clearly not all moments of playing a game are ethically interesting from an ethical point of view. Players routinely perform in-game tasks (walking, collecting items, engaging in combat) that are necessary for gameplay objectives but do not engage with players’ value systems or provide instances for moral contemplation. Sicart (2012) has defined an “ethical gameplay experience” as one that refers to instances of video game play “in which an agent will take a decision crucial to her progression in the game based on heuristics derived from a moral evaluation of said instance of play” (p. 104). He notes that these gameplay experiences are enabled through the interplay...
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