CHAPTER 8

Ethics

Designing and Using Games to Teach Ethics and Ethical Thinking

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Key Summary Points

1. Instead of focusing only on how games can teach specific values, we may also want to think about how they could teach skills associated with ethical thinking.

2. There are a number of frameworks and case studies that suggest the potential of ethics practice through games, but few of them have been empirically tested or assessed.

3. Some best practices include making consequences and feedback on choices clear, allowing more time for players to form relationships with characters in the game, and using authentic scenarios and contexts. These should be further tested.

Key Terms

Ethics
Morals
Values
Ethical thinking
Empathy
Ethical reasoning
Ethical reflection
Ethically notable games
Ethics education

Introduction

Often when people hear the terms "ethics" and "games" in the same sentence, they initially think of violence, addiction, online bullying, sexism, and racism in games, and the like. They may be worried games such as *Grand Theft Auto* or *Call of Duty* are teaching their kids negative values; that their teenager is getting harassed by others in the real-time chats of *Counterstrike*; or, they are concerned their students are spending more time playing games rather than being socially, educationally, or civically engaged. This chapter is **not** about these issues, though they may be valid concerns.

Rather, this chapter instead asks: can games also help us learn how to practice ethics and ethical thinking? If so, what does the research say about this? Are there best practices for designing and using games to teach ethics?

Defining ethics, morals and values

But first, what do I mean by ethics? There are many different definitions of ethics and morals, which often get conflated. Typically, morals refer to "universal truths, or public rules or principles" (Tierney, 1994, p. ix), or agreed-upon, more general guidelines. Ethics, on the other hand, usually are referred to as a more individual, active way of handling morals, an "individual's response to social morality in terms of reflective engagement, valuation, and choice" (Tierney, 1994, p. ix). Likewise, Sicart defines ethics as the practice of making choices and moral judgments to achieve a good human life (Sicart, 2005). The term "values" is also typically found alongside "ethics" and "morals" and are usually the output of one's ethics and morals—these are the principles or guidelines that define what matters to a person, organization or society. For a cross-cultural study of values, see Hofstede (2001) and Schwartz & Bilsky (1990). For more about types of values, see Schwartz (1994).

Some educators and designers reading this chapter may be looking for advice on how to teach kids positive values through games, or to use games to teach kids how to act and behave ethically, and to know right from wrong. The best practices listed at the end of this chapter, as well as the list of resources, may be useful to help you better design games for this purpose. The next section suggests some possible difficulties in using games to teach values.

From ethics to ethical thinking

Some researchers (Schrier & Kinzer, 2009; Schrier, 2010) argue that it could be problematic to design games that focus on teaching kids the so-called right way to behave without teaching the underlying principles or skills needed to determine what is ethical or appropriate. In other words, educators, mentors, and parents need to help kids build the skills and thought processes they need to learn to know how to determine the right or ethical way to act. One issue is that ethics may change from context to context. What is appropriate in one online forum may be very different from what is proper on a playground or a family function. Some of those differences may be obvious, while others may be nuanced, and require cultural awareness, interpersonal skills, empathy, and respect for others. These skills, therefore, would be more beneficial to teach, rather than a list of the rules to be followed in each context.

What may be more beneficial to teach through games is ethical thinking (Schrier & Kinzer, 2009; Schrier, 2010). Ethical thinking is not just about following some agreed-upon code of ethics, or the existence of one right way to do things or how to act. Rather, it is about being able to think critically about the questions and moments in one's life, and judging the right thing to do in a given context, space, or culture. Regardless of whether a person is offline or online, in a classroom or at work, with their family or strangers, in another country or their own backyard, that individual needs to be able to reason, reflect, empathize and gather information to judge how to best behave, act, share or choose. A game, therefore, should focus on teaching the skills associated with ethical thinking rather than merely posit which behaviors or concepts are right or wrong.

Why should we be ethical thinkers?

It may be obvious why we should become ethical thinkers. As we more regularly traverse other cultures in our globally interconnected world, we may also become more frequently challenged with knowing how to behave appropriately. Moreover, Kereluik et al. (2013) identify ethical thinking and ethical awareness as a key component of 21st century learning (2013). In their framework, ethical/emotional awareness contributes to the "Humanistic Knowledge (to Value)" hub, with "Foundational Knowledge" and "Meta Knowledge" as the other hubs (Kereluik et al., 2013). They explain that, "Ethical awareness included…the ability to imagine oneself in someone else's position and feel with that individual as well as the ability to engage in ethical decision making" (Kereluik et al., 2013, p. 5). For example, we need to be able to identify, address, and assuage bullying in new contexts, both virtual and real. Social conundrums, such as global warming, sustainability, poverty, educational inequalities, and access to healthcare are complex and require people to weigh multiple perspectives, evaluate consequences, and be system thinkers (Schrier, 2014). Finally, teaching ethical thinking is not just about helping students address ethical problems or negative values. We also all need to become more engaged ethical thinkers to find new ways to communicate, empathize, give, and accept support, connection, camaraderie, and care across distance, time, culture, and contexts.

Why games for ethical thinking?

Yet ethics as a practice—or as a subject even—is rarely taught or addressed in the K-12 classroom (Schrier & Kinzer, 2009). Games could be one additional way to formally or informally introduce and support ethical thinking skills practice, inside or outside of the classroom. In the preface to her edited book, *Ethics and Games: Teaching Values through Play,* Schrier (2010) notes that there are several characteristics of games, such as the ability to take on new identities and the ability to experience the consequences of one's choices and iterate on those consequences, which may make games particularly amenable to ethical exploration and practice (Schrier, 2010). Further research should consider the potential additional benefits to learning and practicing ethical thinking skills within gaming environments.

About this chapter

There are many concerns related to the domain of ethics and games. Some people are concerned with the modes of game production, distribution and marketing, and the ethical considerations of developing and selling games. Others are interested in how games, as they are both an art form and medium, express the creator's values, and how this may potentially influence or interact with one's audience. These all may be relevant topics that could be discussed and reflected upon as part of a classroom exercise on games. For example, a conversation on the harassment of a female game creator of *Depression Quest* on Steam's Greenlight could help initiate broader discussions of gender, ethnicity, and race in the media, microaggressions and violence, class and privilege, and/or online harassment (see more at Smith, 2013). While this chapter cannot cover all of the possible topics associated with ethics and games, educators, and designers should be aware of the many lenses through which we can use and play games to help us consider ethical issues and better understand humanity.

While there are many worthy ethical issues related to gaming, the rest of the chapter focuses mainly on the design and use of games to support ethical thinking skills and ethical reflection, instead of just the specific ethical topics that games may generate. In other words, how can we better design games or use them in our classrooms, if teaching ethics is one of our goals?

Case Study One: Ethics and Media Research Labs

There are a number of research labs and centers that are dedicated to the study of ethics, values and games. Looking at their latest research questions and findings is a good first step in this problem space.

PetLab (Prototyping, Evaluation, and Teaching and Learning Lab), Parsons The New School and Games for Change

This lab, led by Colleen Macklin, John Sharp, and Karen Sideman, is housed at Parsons The New School, and co-directed by the Games for Change organization. PetLab creates and tests games related to education, public interest, and civic engagement. Projects include *Re:Activism, Play It Forward,* and *Red Cross Games for Disaster Preparedness*.

Values@Play and Tiltfactor

Values@Play is a research initiative, set of game tools, and curriculum developed by researchers seeking ways to help designers incorporate values into their creation of games. For example, the Values@Play curriculum has been used to teach values conscious design (Belman et al., 2011; Belman & Flanagan, 2010). Principal investigators and directors include Mary Flanagan, who runs the Tiltfactor Lab at Dartmouth, and Helen Nissenbaum of New York University. One of the key outputs is the *Grow-A-Game* series, which is a deck of cards aimed at helping designers create games that prioritize values.

Good Play and The Good Project

The Good Project, originally initiated by Mihaly Csikszentmihalyi, William Damon, and Howard Gardner, is a research effort aimed at understanding how we create responsible and caring young citizens in a digital age. A component of this is the Good Play project (part of Harvard's Project Zero), which looks at how youth handle ethical issues in digital spaces, such as games. Good Play is funded by the MacArthur foundation and has collaborated with Henry Jenkins at USC to create a curriculum to encourage reflection on the ethical aspects of digital media, such as Facebook and online games. Their reports also may be especially useful for learning about the teen and young adult space. See more at http://www.thegoodproject.org/good-play/good-play-project/ and http://www.thegoodproject.org/good-play/developing-minds-digital-media/publications/.

Play Innovation Lab

The Play Innovation Lab is directed by Karen Schrier and focuses on creating digital and analog games that support social change, empathy, and ethical reflection. The lab, which is housed at Marist College and launched in 2014, is currently researching the use and design of games to teach ethics, issues of gender and sexuality in games, crowdsourcing and games, and methodologies for reducing online bullying and harassment in games. Relevant papers on ethics and games include Schrier & Kinzer (2009), Schrier (2011), Schrier (2012), Schrier (2014), and a forthcoming paper on the Ethics Practice and Implementation Categorization (EPIC) Framework.

Key Frameworks

There are a number of theoretical frameworks and perspectives that describe the intersection of games and ethics. In this section, I will briefly describe a few key perspectives, which include:

1. **Sicart (2009, 2013):** Sicart, in his book *Ethics and Computer Games* (2009) views games as being "designed ethical objects" (Sicart, 2009). He argues that games do not just feature ethical choices as part of their gameplay, but are also ethical systems themselves. They are products of, played by, and discussed by human beings. Additionally, those game players, game designers, and game commentators are ethical agents, embedded in complex social, historical, ethical and cultural systems (Sicart, 2009). Sicart also wrote a follow-up book, *Beyond Choices: The Design of Ethical Gameplay* (2013), which considers more deeply the design of games for ethics. He uses a variety of games as case studies, including Anna Antropy's *Dys4ia*, *Spec Ops: The Line,* and *Fallout New Vegas* as case studies.
2. **Zagal (2009, 2011):** Zagal (2009, 2011) describes a framework for evaluating "ethically notable" (Zagal, 2011) games. He explains that while not all games directly enable moral reflection and reasoning, those that do are ethically notable games. In Zagal's framework, he investigates whether a game's dilemmas are actually moral and whether there is consistency in how the ethical structure of the game is treated.

3. **In Schrier's doctoral dissertation (2011),** she develops a framework for conceptualizing and assessing ethical thinking in games, particularly role-playing video games. She constructs a model that includes four categories of ethical thinking skill and thought processes: 1) reflection, 2) information gathering, 3) reasoning, and 4) empathy. Her model also includes several "drivers" or underlying motivators, such as "personal ethics," "game status" and "relationship building," which interact with the four categories of ethical thinking to affect how people think through ethical decisions in role-playing video games (see Figure 1).
4. **The Values at Play (VAP) methodology:** Flanagan & Nissenbaum (2007) describe the Values at Play (VAP) methodology (2007), which is a game methodology that articulates how to incorporate social themes and values into one's game design. The VAP consists of three parts: 1) the discovery phase, where designers consider which are the relevant values to include, 2) the translation phase, which involves translating those values into design patterns, mechanics, and gameplay, and 3) the verification phase, which involves testing the game to make sure that the values expressed through the game are what was intended. Flanagan & Nussbaum describe the framework in their book, *Values at Play in Digital Games* (2014). For more information about the VAP, see Flanagan et al. (2005, 2007) and the Values at Play Team (2007).
5. **Ethics Practice and Implementation Categorization (EPIC) Framework:** Schrier (2014) created an in-progress ethics game categorization framework (EPIC) for using games for ethics education. This framework describes different categories of using games for teaching ethics, ethical thinking, and ethical reflection, and cites recent games as examples. The purpose of the EPIC framework is to help teachers find and use appropriate games for teaching ethics in the classroom. For instance, the framework's "Mood" category was defined as "Games that primarily convey emotion … in ways that could help us see new perspectives on humanity" (Schrier, 2014) and uses as examples *Dear Esther and Gone Home*. These are games that could be used in a lesson about how the emotional tone and mood of a game interact with one's empathy for a character's experience. Another category, "Choice," refers to games "with clear ethical choices and decision-making, which have differing effects on the game play," (Schrier, 2014) and consequences for one's game experience. The "Choice" category includes as examples games such as *The Walking Dead, The Stanley Parable,* and *Papers, Please*. These are games that could be incorporated into a lesson about weighing and making ethical choices and reflecting on the consequences of those decisions.

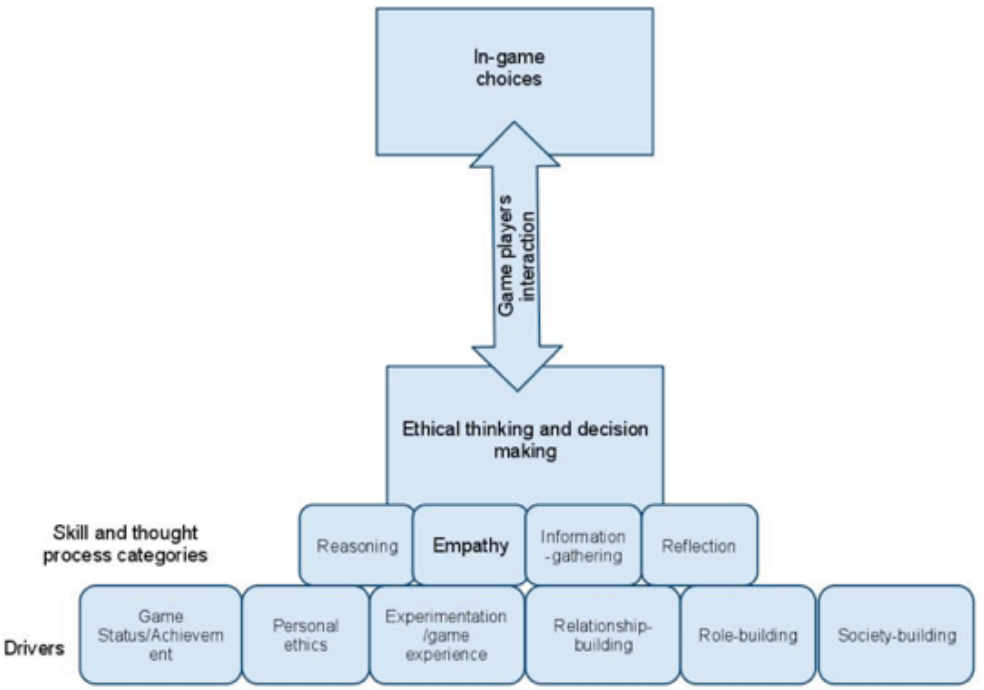

Figure 1. Framework of ethical thinking skills and thought process categories and drivers of ethical decisions in role-playing video games.

There are many other nascent frameworks that deal with ethical issues in games. Other frameworks that may be worth considering include:

1. **Consalvo's analysis of cheating in games and its implications for gameplay and game design (2005, 2007).** She looks at what it means when players use cheat codes, share information in forums, ignore established rules, hack systems, or read through walk-throughs. Her perspective asserts that players actively change and interact with game rules and systems (Consalvo, 2005).
2. **Freier & Saulnier's (2011) framework** for looking at ethical thinking skills through the lens of the moral and social development of children and adolescents (Freier & Saulnier, 2011).
3. **Bogost's (2007) approach to persuasive games**, in which games make arguments about its own meaning through the ways in which they are played. This is different from other types of media because games express meaning through rules and interactions with those rules (procedurally), and not just through the interplay of text and/or images (Bogost, 2007).
4. **Stevenson's (2011) framework,** which classifies and critiques ethics games to recommend ways to make games more ethically engaging.

In addition, when teaching ethics through games, it may be useful to identify an approach to ethics. There are a number of different perspectives on how to define ethics, what constitutes ethics, and how we arrive at ethical (i.e., appropriate or inappropriate, good or bad, or right or wrong) behavior, attitudes, or actions. The following list includes a number of the more commonly used approaches to ethics and ethics education. A good introductory text to these frameworks is Shafer-Landau (2010), *The Fundamentals of Ethics* (2nd Edition). These include:

1. **Virtue ethics:** Virtue ethics focuses on one's character and its virtues in helping to decide and assess the ethics of a situation. For example, what one's actions or behavior reveals about one's character, and the intention of one's actions, all factor into whether the behavior was ethical. The major thinkers related to this are Aristotle and Plato, though since then there have been many others. (For more information, see *Nicomachean Ethics* by Aristotle, Plato's *Republic*, St. Thomas Aquinas, David Hume, and Alasdair MacIntyre).
2. **Hedonism:** Hedonism focuses on the pursuit of pleasure above all others, and that people have the right to seek as much pleasure as possible, as it is the highest good to attain. The major thinkers related to this are Aristippus of Cyrene, Epicurus, and Michel Onfray.
3. **Deontology:** This framework emphasizes adherence to rules, regulations, duties, and other's rights. Kantian ethics is one sub-type. The core of Kantian ethics is the categorical imperative. Other major thinkers who were influenced by Immanuel Kant include Jorge Habermas and Jacques Lacan.
4. **Utilitarianism:** Utilitarianism emphasizes utility, or the best-case scenario that can be achieved by maximizing pleasure or goodness and reducing suffering. The greatest happiness for the greatest number of people is the typical axiom. John Stuart Mill and Jeremy Bentham are the key thinkers.
5. **Feminist ethics:** This is an approach to ethics that attempts to consider more diverse perspectives on ethics, such as including women viewpoints and female experiences on what is moral or appropriate behavior. For example, typically less credence was given to feminine traits, such as emotion, sharing, or connection, when evaluating the ethics of a situation, whereas typically masculine traits such as independence, dominance and autonomy were given more weight. Key thinkers are Mary Wollstonecraft and Elizabeth Cady Stanton.
6. **Ethics of care:** The ethics of care focuses on how empathy and compassion relate to ethics and ethical behavior. The major thinkers are Carol Gilligan and Nel Noddings.

Case Study Two: *Fable III*

Fable III is a role-playing video game developed by Lionhead Studios and published by Microsoft/Xbox. It is the third in the Fable series of games, where a player inhabits the imaginary world of Albion, a medieval-flavored game set in 1800s London. In *Fable III*, players take on the role of a prince or princess, who must go on quests to save Albion from a coming darkness. Along the way, players need to approach ethical choices, such as whether to sacrifice their friend or a number of villagers; or make decisions for Albion, such as whether to build a brothel or orphanage in a town. The choices have consequences for the game player and the game world. For example, if a player builds the orphanage, s/he can go visit the orphanage later in the game. If a player builds the brothel instead, s/he may see homeless non-playing character (NPC) kids and the surrounding town may look darker and more economically depressed.

Schrier (2011) investigated the skills and thought processes players used when working through the ethical scenarios in *Fable III*. To do this, she randomly assigned twenty males to play *Fable III*, with half assigned to play as a male avatar, and half assigned as a female avatar. She also randomly assigned ten males to a control condition, which included written versions of the ethical scenarios in *Fable III*.

Based on this, she found that game players did practice many ethical thinking skills in *Fable III*. She identified and categorized the ethical thinking skills and thought processes used, and labeled 35 distinct skills (e.g., interpreting evidence, weighing pros and cons) and 20 distinct thought processes (e.g., prioritizing people's feelings over any other reason).

Other overall findings were that participants used empathy-related skills more frequently with in-game characters, after they had time to play the game and build relationships with them. There were few gender differences in how people made ethical decisions or ethical skills and thought processes used, unless gender was a specific aspect of an ethical question.

In general, participants did not practice ethical thinking very differently between the written and game scenarios, however, participants used systems thinking more frequently in the game scenarios. Also, game participants seemed to empathize with other's perspectives more frequently than control condition participants, in an additional non-*Fable* related ethical scenario that was read to them, which was outside of the game.

Key Findings

In just the past few years, there have been a number of research studies that have suggested compelling directions for teaching ethics through games. Here are a few:

1. **Hodhod, Cairns, & Kudenko (2011)** created an interactive story game, AEINS, to teach character education.
2. **Fitzgerald & Groff (2011)** tested two games in a grade school in Cambridge, Massachusetts: *Diplomacy* and *Civilization IV*: *Colonization*, to understand how these games may teach ethics from a moral and cognitive development perspective.
3. **Koo & Seider's (2010)** investigated how video games can support prosocial learning.
4. **Belman & Flanagan's (2010)** research from the Values@Play project has suggested a connection between empathy and games.
5. **Simkins & Simkins (2008)** looked at role-playing games and their support of ethical reasoning skills. They determined four categories of features related to ethical reasoning, including mirroring, social context, effecting change, and having significant decisions. Their research is useful in thinking about the reasoning component of ethical thinking, and how it emerges during gameplay.
6. **Schrier, Diamond, & Langendoen (2010)** describe the process of creating a game, *Mission U.S.: For Crown or Colony.* They designed one part of the game to motivate ethical decisions surrounding testimonials on the Boston Massacre, and anecdotal findings suggested that empathy-related skills and thought processes were employed by players in the game, though this has not been studied empirically yet (Schrier et al., 2010). For more information, see Case Study One in Chapter Four.

A number of researchers have also looked at large-scale role-playing games to evaluate the potential of them to encourage ethical practice. For example, Svelch (2010) and Melenson (2011) each analyzed the ethical situations in games for their authenticity and complexity. They separately concluded that the morality meters in games, such as the karma point system in *Fallout III,* and the renegade/paragon system in the *Mass Effect* series, do not encourage the practice of ethics. Instead, they appear to motivate players to maximize the amount of "goodness" or "badness" achieved in the game, as if it is just another attribute for their avatar, like agility, strength, or happiness (Svelch, 2010).

Schrier (2011) investigated *Fable III,* a role-playing game, to identify, evaluate, and analyze the types of ethical thinking skills practiced in the game, versus written scenarios based on the game. Her findings are described in greater detail in the case study (see Case Study Two). Moreover, results from Schrier's (2012) study of *Fable III* and avatar gender found that the gender of one's avatar may affect how participants think through ethical scenarios, but only if it was a salient part of a scenario (all participants were male, playing as either male or female avatars). The results also suggested that players were more likely to make different ethical decisions based on their avatar's gender in the beginning of the game experience, when participants were not as fully immersed in their role. In addition, despite whether participants made so-called "good" or "bad" decisions, they still practiced a variety of ethical

thinking skills, and there were no avatar gender differences found. Schrier (2014) also showed, using *Fable III*, how games could be windows into ethical thinking around sustainability and environmental questions, by showing how (through a game) people can think through and prioritize environmental concerns as opposed to other issues.

Assessment Considerations

How do we know if we are becoming more engaged ethical thinkers? How do we assess the ethics of one's behaviors, actions, or thoughts, particularly when there is debate about what it means to be ethical or how we arrive at this, in any context, let alone in games? One of the key challenges in assessing ethics games is that we do not yet have clear, vetted, universal assessment techniques. This is not surprising, since every ethical moment or situation is different, and there is no objective checklist for how people should act, behave, share, or feel. A few studies have sought to assess a game's efficacy in supporting the practice of ethical thinking and ethics. These include researchers who used:

1. **Mixed methods,** such as a "talk aloud" and discourse analysis, and the creation of a coding scheme and identification and comparison of skills and thought processes applied on scenarios, before and after the game, or between a control and experimental group (Schrier, 2011, 2012, 2014).
2. **A pre- and post-game activity,** such as a Paul Revere image, which was used in assessing historical and ethical thinking in *Mission U.S.: For Crown or Colony* (Schrier et al., 2010). (See more in Case Study One in Chapter Four.)
3. **Textual analysis,** such as those conducted by Zagal (2011), Svelch (2010), and Melenson (2011).
4. **Design research,** in which the process of design serves as a type of formative assessment, such as those designs conducted by Barab et al. (2011) on *River of Justice* and Macklin (2010) on *Re: Activism*.
5. **Focus groups or case studies,** such as those conducted by Fitzgerald & Groff (2011).
6. **Ethnographic approaches,** such as those done by Consalvo (2007).
7. **Designer reflection,** in which the designer interrogates and reflects on his or her design, as in the case of Brathwaite & Sharp (2010) and Brathwaite (now Romero's) *Train*.

Future Needs

There are still many gaps in the research, namely, further empirical research and assessment to understand the short- and long-term effectiveness of games to support the practice of ethical thinking. While hopefully this chapter has suggested the potential of games as a site for ethical exploration, reflection, and practice, more investigation is necessary to fully understand the factors that affect ethical thinking in games, such as how specific game elements affect, limit, and motivate ethical thinking.

Case Study Three: Bioware

Bioware, a game studio, is known for creating role-playing video games that feature ethical choices and scenarios, such as the *Mass Effect, Dragon Age,* and *Knights of the Old Republic* series. These games may be useful to play and use for educational purposes to better understand and reflect on how the designers created the game's "ethical system," ethics game mechanics, and ethics meters. For instance, in Bioware's games, the choices a player may have consequences in the game's world, and they may affect one's social standing, play options, story, and/or relationships in the game. Depending on one's actions, one's avatar may have levels or resources that go up or down, which in turn may affect their abilities and/or story options in the game.

In Bioware's *Mass Effect* series, for example, you create a character named Commander Shephard and lead him or her to make choices that will help keep peace in the galaxy and potentially protect the human race. Throughout a series of science fiction adventures, you, as Shephard, make choices on how to interact with alien races and other human beings, and build a team of allies to support you on your quest to save the universe. You can make choices and pick dialogue options—you can act polite and by the book, or act rebellious and above the law. Depending on how you act, you may end up more on the "paragon" or "renegade" side, respectively, or even somewhere in the middle, which may lead to new dialogue and gameplay options being unlocked or blocked, and differences in how non-playing characters (NPCs) treat you.

Similarly, in the *Dragon Age* series, you play as a character that is a Grey Warden (an order of warriors) in a fantasy setting. You need to form alliances with NPCs to help unite the world and go on quests to stop, and ultimately kill, an archdemon. As part of this game, you select from a list of dialogue options. Depending on how you relate to the NPCs, they will have differential levels of loyalty and friendship. As with *Mass Effect,* your choices have an effect on your gameplay and standing in the game world. In *Dragon Age*, however, it is sometimes less clear how dialogue options or actions map to the game's nuanced and complex morality system. The paragon/renegade distinction in *Mass Effect* is much more clear-cut and players can continually check to see where their avatar ranks in this moral system. Likewise, Bioware's *Knights of the Old Republic* game series also includes morality systems and is based on the Star Wars universe, such as the Jedi Knight versus Sith dichotomy.

Educators and designers may want to use Bioware's games, and the principles behind their games, in the classroom, or to inspire their own activities or games. Although the games are for mature game players, educators may be able to use or modify specific scenes or dialogue from the games. For example, a teacher could show a brief interaction between Shephard and another character, and invite students to discuss how they would respond to the situation. Another potential classroom activity is to discuss as a class how Bioware designers approached the challenge of representing ethical thinking in *Dragon Age,* including unpacking its moral system and game mechanics.

Best Practices

The following design principles should be considered when creating games to teach ethical thinking, based on a survey of the current frameworks and findings. These include:

1. **Players should be exposed to alternative perspectives.** Adolescents, for example, who are exposed to opposing views on social topics show improvement in argumentation skill (Kuhn, 2008; Kuhn et al., 2008).
2. **Players should be able to deliberate with others.** Players who had the opportunity to deliberate and debate topics with others were better able to improve argumentation skill (Kuhn, 2008; Kuhn et al., 2008). Further research should consider whether these need to be real people, or if virtual characters are sufficient.
3. **Players should be able to make choices.** The participants need to have an element of agency in making decisions.
4. **The choices should be relatable.** Players are more deeply engaged in practicing thinking skills with choices that are personally meaningful and relatable.
5. **The game's context should be personally meaningful and authentic.** The context surrounding any choices, as well as the choice itself, should be genuine and meaningful. By making the opposing views and choices authentic, participants are potentially more apt to bring in their own views and think through the problem as they would outside of the game, as well as use and apply what they learn and practice in the game.
6. **Any consequences should be appropriate.** Players are more motivated to apply thinking skills to dilemmas if the consequences to their choices are appropriate, relevant and authentic; and they are aware of the consequences.
7. **Players need time to develop relationships with their avatar and with other characters to build empathy for them**. Players may need time in the game to develop relationships with any NPCs to be able to better empathize with their points of view (Schrier, 2012). Players also may need more time to fully identify with their avatar to be able to think through ethical decisions more deeply, particularly if they feel, at first, that their avatar does not represent them. Embodying a different avatar gender than their own gender, for example, may make participants feel that their avatar does not represent them, at least initially, when playing a game. This appears to decrease over time as the participant has more opportunities to behave as him or herself in the game.

Resources

Research Labs

Berkman Center for Internet and Society
Engagement Game Lab
GoodPlay Project
MIT Center for Civic Media
PETLab
Play Innovation Lab
Tiltfactor
Values@Play

Related Researchers

Mia Consalvo
Jim Diamond
Mary Flanagan
Eric Gordon
Carrie Heeter
Helen Nissenbaum
Doris Rusch
Karen Schrier
David Simkins
Jose Zagal

Books, Blogs, Websites, and Reports

Anna Anthropy (http://auntiepixelante.com/?page_id=2142)
Bogost, I. (2011). How to Do Things With Games. Minneapolis, MN: University of Minnesota Press.
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Mattie Brice (http://www.mattiebrice.com/)
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Games

While any game, arguably, can be useful to understanding teaching ethics through games, these games may be particularly relevant:

AEINS by Rania Hodhod, Paul Cairns and Daniel Kudenko
Akrasia
Airport Security
Awesome Upstanders
Bastion
Bioshock series
Buffalo
Cart Life
Darfur is Dying
Dear Esther
Deus Ex
Deus Ex: Human Revolution
Diplomacy
Dragon Age Series
Dys4ia
EthicsGame by Catharyn A. Baird
Everyday the Same Dream
Fable Series
Fallout 3
Fallout: New Vegas
Gone Home
Grand Theft Auto series
Grow-A-Game by Values@Play
Heavy Rain

Howling Dogs
Hush
Ico
Knights of the Old Republic
LA Noire
Layoff
Lim
Madrid Game
Mass Effect series
McDonald's Game
Mirror's Edge
Mission US series
Oblivion
Papers, Please
Paralect
Passage
Parenthood
Peacemaker
pOnd
Portal/Portal 2
Quandary Game by Learning Game Network
Re:Activism by PETLab
Red Dead Redemption
River of Justice by Sasha Barab, Tyler Dodge, Edward Gentry, Asmalina Saleh, Patrick Pettyjohn
Seeds by Nahil Sharkasi
September 12
Spec Ops: The Line
Super Columbine Massacre RPG
Sweatshop
Skyrim
The Arab-Israeli Conflict and *First Wind,* by Sharman Siebenthal Adams and Jeremiah Holden
The Shooting at Sandy Hook
The Stanley Parable
The Suffering
The Walking Dead Season One/Two
The Yawhg
Train by Brenda Brathwaite/Romero
Triad
Unmanned
Way

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