Chapter 8
Confronting the Dark Side of Video Games

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Abstract

New video games have increasingly allowed players to choose their own destiny (or path of character development) by presenting them with choice of actions from both light and dark sides. Some studies suggested that players who have been exposed to the "dark side" of video games may act out unacceptable social behaviors based on their learning experiences. This issue of the effect of unintentional learning in video games deserves much scrutiny and honest discussion among researcher. Unfortunately, the issue has so far, either been bashed or glossed over by experts on both side of the effect-of-video-games chasm.

As educators, we have the responsibility to carefully evaluate and consider the effects of video games in learning because it is our duty to educate and shape the young minds. Rule #1 remains, "Do no harm!"

8.1 Introduction

The new millennium has brought about many exciting changes, amongst them a complete turnabout with regard to the initial perception of video games as an entertainment into a medium for learning. Although parents of children who spent many hours playing video games may still insist that playing video games is a 'time wasting' activity, a growing number of scholars, educators and scientists are coming to grips with the medium as a viable tool for learning (e.g. Feller, 2006; Gee, 2005; Gibson, Aldrich, & Prensky, 2007). In 2006 alone, the total revenues spent on gaming software and newly released game consoles (namely Xbox 360, PlayStation3 and Nintendo Wii) reached an unprecedented $12.5 billion (Ortutay, 2007). The Next Generation game consoles were so overwhelmingly in demand that the new devices were sold out on the very day of the product launch (Wallace, 2006)! It is widely believed that the multi-billion dollar electronic gaming industry will fuel a worldwide craving for video games for many years to come.

To meet the heightened demand for even more video games, game publishers are in need of a bigger workforce, including level designers, story/script writers, graphic artists, and game programmers in the coming years. More than 100 Col-

leges in the United States (U.S.) have stepped up to the plate by offering video game-related degrees to meet the growing market demand (Associated Press, 2005). Some major game publishers (such as Electronic Arts) have even awarded endowment money and internships to universities to help support their video game design courses (CNN Money, 2005). Many academics became interested in unique features of video games and how the new affordances may directly, or indirectly, affect learning. This is a marked departure from research efforts in the past that focused primarily on the negative effects of media on society.

8.1.1 Unique Features of Video Games

Despite the initial wave of approval, much research will still be required to examine the unique features of video games for learning. A second booster shot from the video game-based learning (VGBL) movement came from the Federation of American Scientists (FAS). In 2006, the FAS issued a joint call with the Entertainment Software Association (ESA) for federal funding to be made available (Cheng, 2006), for research towards harnessing the power of video games for learning (FAS, 2006b). The report by FAS listed several benefits for using video games in learning, including: "clear goals, lessons that can be practiced repeatedly until mastered, monitoring learner progress and adjusting instruction to learner level of mastery, closing the gap between what is learned and its use, motivation that encourages time on task, personalization of learning, and infinite patience" (FAS, 2006a).

There may be other media-specific features of video games that could enable a new way of interactive learning currently not possible. Some of these unique features include continual audio-visual stimuli, and 3-Dimensional (3D) virtual environments. Already, successful navigation of 3-Dimensional environments has been associated with the improvement of spatial cognition skills in gamers (Osberg, 1997; Sims & Mayer, 2002). Video games are an exciting and promising technology because they seem to 'have it all,' and at the same time, offer broad appeals to the 'gamer generation' (Beck & Wade, 2004), 'digital natives' (Prensky, 2001a), and even scientists, researchers and academies. Eventually, it is everyone's hope that school children will directly benefit from the VGBL. Will parents find their kids spending too much time playing video games? Prensky (2006) already has an answer: "Don't bother me Mom – I am learning!"

8.1.2 The Holodeck[1] Experience

The most fantastic feature about video games is its affordance[2], or visual cue to its function and use for players to step inside the '*magic circle*' (Salen & Zimmerman, 2004, p. 95) to interact with virtual people and objects within an imaginary *gamescape* (King & Krzywinska, 2003). Murray (1998) compared this feature to Star Trek's *Holodeck*, which she described as the *'ultimate fantasy machine'* in human imagination. An even more intriguing phenomenon happened within this video game *Holodeck*. Although players knew that virtual characters within a video game consisted of only colored digital pixels and shaded polygons, they often found themselves treating the virtual bodies as real people. One writer described, "You may know at one level of your mind [that these people] are colors on a screen, but your mind at another level sees them as people" (Mills, 2006). The meshing of reality with the virtual is looming as hardware technology and 3D modeling software become more advanced. Soldiers who engage in virtual battle training often cannot distinguish what's real and what's not (Karr, Reece, & Franceschini, 1997).

   With current technology, it is already possible to create virtual humans with anatomically-correct bodies with freckles, feelings[3], and flowing hair. In the not so distant future[4], advances in auto-stereoscopic[5] projection displays (Weinand, 2005) and photorealistic computer-generated models with a full-range of emotions (Grizard & Lisetti, 2006; Paleari & Lisetti, 2006) will complete the illusion of immersive play (Brown & Cairns, 2004) — bringing the concept of *Holodeck* closer to reality.

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[1] A virtually simulated "room" found on starships and star-bases in the *Star Trek* universe. Users, who stepped into the Holodeck, entered an immersive environment where they could interact with objects and people in it just like in the real world.

[2] Norman's affordance: http://www.interaction-design.org/encyclopedia/affordances.html

[3] These feelings are expressed as emotes (or actions that mimic human expressions of emotion). A virtual character's range of "emotes" is pre-determined by the programmer. For example, if the programmer did not create a "crying" emote, the game character will not be able to cry.

[4] Can't wait for the future? Check out http://www.vrealities.com/vrealviewer3d.html

[5] Auto-stereoscopic: Display of 3D (stereoscopic) images without the need of extra devices like shuttle glass or Head Mounted Display.

8.2 Video Game Playing

8.2.1 Practice Makes Perfect?

The common adage, "practice makes perfect," suggests that a person who devotes time to repeatedly performing a certain task will eventually achieve expertise. It should be of no surprise to anyone that a person who has chosen to dedicate many hours to diligently practice a certain cognitive-motor skill will eventually reach some sort of competency in the said skill. (Unfortunately, this belief might have also contributed, in one way or another, to the prevalent 'drill-and-kill' practice found in many classrooms.) When surveyed, professionals with a *culture of practice* (e.g. musicians, athletes, chess players, pilots) (MacMahon, Helsen, Starkes, & Weston, 2007) often attribute their success, or expertise, to copious *practice*. For instance, the amount of time spent on serious play for chess grandmasters was found to be nearly 500% more than that reported for intermediate-level players (Charness, Tuffiash, Krampe, Reingold, & Vasyukova, 2005). Compared with amateur pianists who spent an average of 1.88 hours per week in solo practice, award-winning pianists spent an average of 26.71 hours weekly (Ericsson, Krampe, & Tesch-Romer, 1993) — a difference of more than 1,420%!

Recent neurophysiology studies into video game players also appeared to support the notion of *practice makes perfect*. Findings showed (a) human brains secrete a substantial amount of *dopamine* [6] during video game playing (Koepp et al., 1998), (b) some video games can stimulate as much dopamine release as that induced by amphetamines (Kapur & Seeman, 2001, p. 364), and (c) *practice* stimulates the human brain to activate certain neuro-cognitive pathways that help enhance skill acquisition (Smith, McEvoy, & Gevins, 1999). Hence, Rosser Jr. and colleagues (2004) suggested that avid gamers who spend many hours each week playing video games will eventually master the video games (if not the game controller) through the establishment of new learning pathways in their brains.

8.2.2 Deliberate Practice

Decades of research study related to 'expertise and expert performance' likewise support the notion of "practice makes perfect" (Ericsson, Charness, Feltovich, & Hoffman, 2006). Ericsson, *et al* asserted that 'expertise' was the result of *deliberate practice* and that "the highest levels of performance and achievement appear to

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[6] Dopamine is a neurotransmitter that produces feelings of enjoyment ("reward") in humans. Thus it could reinforce or motivate a person proactively to perform certain activities.

require at least around 10 years of in-tense prior preparation" (1993, p. 366). The 10-years rule7 was first observed in international chess masters (or grandmasters) and has been verified in several domains, including: music, music composition, mathematics, tennis, swimming, and long-distance running. Ericsson commented that surgeons are the only kind of medical doctors who get to improve their skills through deliberate practice: they set goals and obtain immediate and meaningful feedback with each successive surgery. Medical doctors, on the other hand, tend not to be able to receive feedback immediately (to confirm their diagnosis) and risk losing touch with their skills over time. This may help explain why laparoscopic surgeons who received additional motor-skill practices by playing video games were actually found to complete surgical procedures faster and with greater accuracy than their colleagues who received lesser or no additional training (Marriott, 2005). The investigators affirmed that video games used in this study were chosen specifically for their similarities to surgical procedures, which include: fine motor skills, reaction time, eye-hand coordination, non-dominant hand dexterity, two-handed choreography, targeting, and 2-D depth perception compensation (Rosser, Jr. et al., 2004). The implication is that: with persistence, sufficient practice, and appropriate feedback, almost anyone can become an expert of some sort: like Jonathan Wendel.

8.2.2.1 Fatal1ty

Born and raised in Kansas City, Missouri, Jonathan Wendel (better known as 'Fatal1ty') has risen through the ranks to become the top U. S. professional video game player. In an interview for CBS Broadcasting Network's '*60 minutes,*' he compared competitive video gaming to '*playing chess on caffeine*' (Court, 2006). He is a cyber-athlete, or e-sportsman, and would compete in cyberathlete (video game) tournaments just like other professional sportsmen (e.g., Tiger Wood and Michael Jordan). In just seven years (since 1999) of becoming a professional e-sportsman, he has won the World Championship in five different video games, and more than $1 million in tournament prize money. He has become the unofficial spokesman (or ambassador) for the e-sport industry and owns the license to a line of computer products and apparels with the brand: 'Fatal1ty.' His mission (or motivation) is to "prove that PC gaming is legit," both to the world and to his mother, who had objected strongly to his playing video games during his early years.

When he was traveling on tournaments, he spends whatever remaining waking hours practicing in the hotel room with a traveling 'sparring' partner. Even when at home, he tries to play for 8-12 hours a day because he treats video game playing

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7 The "10-year rule" was based on an earlier work (Simon & Chase, 1973), which documented that chess grandmasters required about a decade of intense preparation to reach that level of expertise.

as his full time job. He told the *Business Week* reporters (Hamm & Carney, 2005), "I set my goal. I wanted to be the No. 1 [sic] player in the world." He also stays focused on one game at a time so as not to be distracted. Once, he stayed on the game Quake III for 18 months! When asked about his secret to success, Wendel said, "Practice is the key to being the best at anything, but not everyone has the drive and determination… to become the best" (Cyberathlete Professional League, 2003).

8.2.3 Immediate Feedback

Interestingly, Fatal1ty's 'rising star' journey to become the video game grand-master sounded conspicuously like *deliberate practice* (Dubner & Levitt, 2006), for he met all the conditions necessary for optimum learning and performance improvement (Ericsson et al., 1993):

1. *Be motivated* — Wendel is passionate about playing video games;
2. *Set clear goals* — he is determined to win tournaments;
3. *Adopt a training strategy* — he focused on techniques that would help him win: finding 'sparring' partners, practicing daily, staying fit, etc.;
4. *Obtain immediate feedback* — because of the way video games are designed, the gaming environment already provided him with the immediate and meaningful feedback he needed to improve himself; and
5. *Repeatedly perform the same or a similar task* — he engaged in video game practice for 8-12 hours daily.

Readers who are educators or instructional technologists may immediately recognize that the conditions listed above are reminiscent of several well-known educational learning theories, e.g. Robert Gagné's Nine Events of Instruction (Gagné, 1985), Robert Mager's Criterion Referenced Instruction (Mager, 1997), and John Carroll's Mastery Learning (Carroll, 1989). All of these theories have one thing in common: the importance of immediate feedback for effective learning. Educators have known for a long time that delays in feedback will hamper performance (Skinner, 1968). Ericsson echoes a similar belief, "In the absence of adequate feedback, efficient learning is impossible and improvement only minimal even for highly motivated subjects. Hence mere repetition of an activity will not automatically lead to improvement in, especially, accuracy of performance" (Ericsson et al., 1993, p. 367).

However, educators had to struggle with *immediate feedback* for many years, because it was humanly impossible to instantly provide feedback to 20-30 students in the class, or complete the grading of students' homework the moment they were handed in! The advent of computer technology, and computer assisted instruction (CAI) in the 70s, helped educators to overcome many of the hurdles of providing immediate feedback. Computing technology made it possible for learners to re-

ceive instant feedback about their performance. However, educators and instructional designers soon discovered the next hurdle: How many test questions can learners attempt before they become tired, bored, or irritable?

8.2.4 The Source of the Feedback

Video games do not have these limitations because they are designed to be fun (Koster, 2005), interactive (Crawford, 2003, 2004), and engaging (Michael & Chen, 2006; Poole, 2004) continuous play. In theory, a video game makes a great 'teacher' because once a player starts playing; the video game is immediately available to provide the player with a continuous stream of feedback! Feedback from scoring and audio-visual stimuli also allows learners to change or modify their learning strategies "before the ineffective ones become entrenched" (Javid, 2004). Yet, consider this: Who (or what) is the actual source of the feedback?

Because a video game is a software program, it is written by one or more programmers. Based on this argument, all stimuli and corresponding feedback must first be thought out and then coded into the game engine. Thus, it is up to the game makers (in short, everybody who has a say in what goes in to the game: programmers, publishers, level designers, artists, script-writers) to plan out and approve the video game's contents. In this case, the video game's contents includes a virtual world and its physics engine, player-characters modeling, landscapes, props, dialog, music, lighting, and missions, as well as the audio-visual stimuli and corresponding feedback. This brings the first dilemma in VGBL: **Who controls the video game's contents?**

DILEMMA #1: Who Controls the Video Game's Contents?

There is a saying that "those who have the gold set the rules." It is often the game publishing companies and sponsors who get to approve or decide the contents that go into video games. A majority of the people who design and develop video games do so as employees. They are likely to do what is being 'asked for' by the ones who control the purse-strings, because they are not likely to risk their livelihoods to do otherwise.

Example: Under Siege is a Middle-Eastern themed video game that targets Muslim children (aged 13 and above) by depicting them as the 'good guys' against Israeli Security Forces. Its purpose is to "subvert the typical gaming stereotype of Arabs as bad guys…" *The Washington Post* reported several controversial Islamogames (including several there were funded by Hezbollah) that have made their debuts since the rise of global terrorism (Vargas, 2006).

Conclusion: A video game's contents (with any overt or covert messages) are likely to be controlled by the funding agencies, ranging from the video game pub-

lishers (corporations), to sponsors, to independent game author(s). The issue then becomes who is 'teaching' the player, and to do what? While older gamers may be able to discern between good and evil, and right from wrong, children whose mental faculties are not yet fully developed, may not be the capability to do so.

8.3 The Rising Controversy

Amidst all the good reviews and fanfare about video games' potentials for learning, one issue has remained a hot button topic that is strongly debated in various public (online as well as political) forums. After several school shooting tragedies in recently years, the amount of graphical violence depicted in video games quickly drew national attention. Reportedly, some of the teenage shooters were found to have used violent games (e.g., *Doom*, and *Wolfenstein 3D*) as practice for their crimes. Based on the gamers' demography report (ESA, 2006), 70% of U.S. households and 92% of U.S. children below 18 years of age (Beck & Wade, 2004) play video games every week. Certainly, a good percentage of teenage male gamers would have access to 'classic' violent games (such as *Doom*) at one time or another. However, access alone does not a killer make, and such an implication upsets many avid gamers. When a gamer posted a weblog comparing the rise of video games against decreasing U.S. crime rates since 1993 (Ferris, 2005), it quickly became circulated as the 'research evidence' needed to dispel the association of violent youths and video games. Anderson (2003) pointed out the shortcomings of the hypothesis:

> "Three assumptions must all be true for this myth to be valid: (a) exposure to violent media (including video games) is increasing; (b) youth violent crime rates are decreasing; (c) video game violence is the only (or the primary) factor contributing to societal violence. The first assumption is probably true. The second is not true, as reported by the 2001 Report of the Surgeon General on Youth Violence. The third is clearly untrue. Media violence is only one of many factors that contribute to societal violence and is certainly not the most important one. Media violence researchers have repeatedly noted this."(p. 5)

In addition, any 'reported' rate of violence is "very likely a substantial underestimate" because violence acts that occurred *behind closed doors* are not reported (Straus, Gelles, & Steinmetz, 2006, p. 33). Although the seeds of violence beget violence, they don't always produce crime.

8.3.1 The Debate about Violent Video Games

Because several states are currently seeking to ban sales of objectionable (i.e., violent & sexually explicit) video games to minors, this topic would occasionally

break out into heated debates in online forums operated by video game companies. Sometimes the focus of these debates would shift from a "ban on sales of violent video games **to minors**" to a "ban on sales of violent video games" (implying everyone). While the former is debatable, the latter is usually not well received by the gamers' community. The most interesting revelation is that those who are most vocal tend to eventually identify themselves as minors who do not want to miss out on playing objectionable video games if the ban is put into place!

The   Merriam-Webster   online   dictionary   [http://www.m-w.com/dictionary/violence] defines 'violence' as: *exertion of physical force so as to injure or abuse*[8]. Effects of media violence on young children have long been a research agenda of the Adult and Children Together (ACT) Against Violence project group of the American Psychological Association (APA). In 2004, the APA issued a Congressional Testimony on Media Violence and Children, highlighting the harmful effects of violence in video games on children (McIntyre, 2004). This was soon followed by several other hearings (*Violent and explicit video games: Informing parents and protecting children*, 2006; *What's in a game?: Regulation of violent video games and the First Amendment*, 2006). A number of states in the U.S. tried to ban sales of 'violent' video games to minors, but the decision was overturned after being challenged as unconstitutional by the video games industry (Gledhill, 2005). Is banning video games to minors unconstitutional as ruled? Are video games considered speech? The answers are not so straightforward. (Interested readers are welcome to find out more and decide for themselves by visiting the   National   Constitution   Center   Website   at: http://www.constitutioncenter.org/education/ForEducators/DiscussionStarters/ BanningViolentVideoGames.shtml)

Today, the issue remains a media melee, drawing heat from politicians, educators, parents, psychiatrists, policy-makers, researchers, gamers, game publishers, conservatives, liberals, etc. Without going further, I hope you can sense the looming threat: Should this continue, the polarization of viewpoints will kill VGBL before it even has a chance to be used in the classroom (or anywhere else)!

Escalating violence and terrorism in the Middle East, coupled with the rise of politically sensitive Islamogames (see Dilemma #1) has prompted the European Union (EU) to echo similar concerns about the effects of violent video games on children, with possible regulatory measures (Bangeman, 2006). Although, to many psychologists, the scientific debate about the effects of media violence is already over (Anderson, 2004), some proponents of VGBL remained skeptical and have declared this issue to be over-rated.[9] While it is commendable that they have chosen to forge ahead in VGBL by focusing on the positives instead of the negatives,

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[8] Definitions that are irrelevant to this discussion have been left out intentionally.

[9] I have chosen not to list any name or reference for this claim. However, it should be easy enough to identify this group of advocates. One of the telltale sign is: they tend to pioneer the use of controversial (e.g., violent) video games in VGBL research (and in schools).

is it a wise decision to brush aside several decades' worth of media violence research as trivial?

Perhaps one can get away from addressing the issue in a higher education institution, or a postmodernist community comprised of 'adults,' who can make up their minds about the merits of violence in video games. But if you are an educator, or a K-12 teacher, the contents — more importantly, the message — of video games should become your concern. Anderson (2004) finds it alarming that society would choose to ignore the risk of video games (with a greater *'effect size'*)[10], and instead, go to great length to put in place extensive steps and expensive measures to educate the public about other health issues (with smaller *'effect size'*) — e.g., HIV infections, passive smoke effects, and bone mass loss in old age. This brings us to the second Dilemma in VGBL: **How do we deal with violent games?**

DILEMMA #2: How do we deal with violent games?

Educators would do well to remain open-minded about violence in video games because there are plenty of grey areas. While blood and gore is considered to be gruesome, I venture to say that 'violence' is at best, neutral; and at worse, ambiguous. Violence *per se* is **neutral** because it is often a survival feature in nature (consider the food-chain, or hunting for food). The very notion of safety and protection indicate the existence of violence (nature or man-made). Violence is also **ambiguous** because it is loaded with moral implications. Any attempt to define what counts as 'violence' commits a person to accept some of his/her own acts as violent or not violent. Video games figure into that reflection process.

Example: Is violence 'bad'? If someone intend to harm you (with violence), are your actions to defend yourself (violence in return) justified? When United Airlines Flight 93 was hijacked, should the passengers have avoided violence and allowed the hijackers to drive the plane to its intended destination?

Conclusion: It is nearly impossible to grow up in a gamer generation without having played some 'violent' games. Some reports claim that as high as 80-90% of video game depicts some amount of violence (the percentage greatly varies depending on which report and whose definition you accept). The rating assigned by the Entertainment Software Rating Board (ESRB) is no litmus test, either. Should you hold the view that violence is evil, a 'violent' video game that upholds justice and promotes good may be considered *less evil* than one that 'forces' the players to take on the role of villains. More so, because children tend to imagine themselves as the heroes (typically the central character) in the story, leaving them with no alternative to the central character (as in the case of *Grand Theft Auto*) will result in these children casting themselves as gangsters, and worse, interpreting the acts depicted in the story as heroic things to do. The same argument works for

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[10] Effect size of violent video games: 0.26.

video games depicting heroes as the central character, but we can all use more heroes.

Alternatives: While I recognize the fact that you need two sides (good and evil) to create tension in making an interesting story, we can either: (a) let the computer generate the bad guys as non-player characters, or (b) allow the player dual (maybe even multiple) perspectives by allowing player the choice to choose from both the good and/or the bad side (c.f., *Star Wars: Knights of the Old Republic (KotOR)* series). In that way, a more 'balanced' (albeit artificial) view may be presented, bearing in mind that the players (audience) are always subjected to the mercy of the story tellers to invoke fear, pain, horror, and disgust, as well as justice, joy and dignity.

8.3.2 'R' is for…

When a product is found to be defective because it reportedly caused harm or introduced a safety concern, the company (or industry) may issue a product 'recall' to safeguard their consumers' interests as well as protect the reputation of the company. Though such a measure would be a very costly affair for the company, it is often deemed to be goodwill and is necessary for the image of the brand and company. The company would gain consumer confidence by being *socially responsible*. Well-known cases of product recall include the 1982 Tylenol recall (the immediate action taken by Johnson & Johnson was highly praised) (Wolnik, Fricke, Bonnin, Gaston, & Satzger, 1984), the 2004 Vioxx recall (Karha & Topol, 2004), and the 2006 global laptop battery recall by several major laptop manufacturers (Associated Press, 2006).

One prominent example involving the recall of a video game by its publisher was the game *Grand Theft Auto: San Andreas*. In this game, an explicit sexual mini-game (though allegedly abandoned early in development) was left on the CD. One innovative gamer managed to 'unlock' the mini-game by modifying one 'bit' of code in the game, and then releasing the modified game content (i.e., a game *mod*) as the *Hot Coffee mod* on the Internet. The news spread like wild fire, and gamers (including teenagers or younger) soon gained access to the explicitly sexual mini-game via online sources. Despite claims of ignorance from the publisher, the ESRB ruled the presence of hidden content to be corporate negligence and changed the rating to 'AO' (Adults Only)[11]. The new rating forced major retailers like Wal-Mart and Toys-R-Us to pull the game from their shelves. The game publisher was eventually forced to recall the game and reissue it without the mini-game to revert the rating back to 'M'(ature)[12] (Thorsen, 2005).

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[11] Adults Only: for persons aged 18 and older. The ESRB Rating symbol reads "Adults Only 18+."

[12] Mature: for persons age 17 and older. The ESRB Rating symbol reads "Mature 17+."

Although the recall was 'mandatory,' gamers who owned the original CD viewed it as a collector's item, and refused to exchange it for a new CD. Some gamers even make a good profit selling the original game media on eBay, which fetch an even higher price tag than the new game (without the mini-game). Some questions remained unanswered: Should the recall of such games be mandatory by federal law? Is the possession (and resale) of a recalled product a misdemeanor or felony?

Another video game, *Oblivion: The Elder Scroll IV*, also suffered a rating change from T(een) to M(ature) after ERSB found additional violent content and 'nude' skins that would alter the graphics of non-player characters (NPC) to include partial nudity. About six months after release of *Oblivion*, enthusiastic modders had created various skin patches to 'enable' the game to display full male and female nudity.

Some controversial contents may, in fact, not be the fault of the publisher, such as the case for *Oblivion: The Elder Scrolls IV (TESIV)*, and *Neverwinter Nights (NWN)*. After the games were released, some gamers who have extensive knowledge of 3D modeling wanted to 'improve' the appearance of certain female non-player characters — i.e., render them topless (Sinclair, 2006). Soon after, both male and female nude 'skins' began making their ways to the Internet and were distributed as free downloads to any gamers who wanted them. There is no news from the ESRB about a re-rating of *Oblivion* (yet?), although it remains a possibility.

Game mods and nude skins such as the one described here were *presumably* targeted at adult gamers, and were created by gamers, for fellow gamers. Though this outcome is not directly the fault of the publishers, it does not negate the fact that minors can gain access to these free nude patches through public download. Requests of nude skins for role-playing games have become increasingly common. Because *mods* were distributed via the Internet, there is no viable way to curb distribution at this moment.

Despite video games being a newcomer in (mass) media, much controversy has been associated with their content, and much has also been written.[13] The ESRB was established in 1994 as a move by the industry to 'self-regulate' rather than waiting for government to impose censorship. Yet, many questions remain unclear: Are the measures of self-regulation sufficient? Are the regulatory measures enforceable? Is the ESRB too harsh or not harsh enough in rating the video games?

Studies conducted by the Federal Trade Commission (FTC, 2006b) have shown that children can indeed purchase video games beyond the approved rating in stores without the accompaniment of an adult, or ID check. Under-age children have been known to go to gamers' (online) forums to inquire where to get access to such games, and user's advice typically includes gaining access through an

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[13] The Wikipedia contains a detailed write-up, albeit from a video game proponent's point of view. Available online: http://en.wikipedia.org/wiki/Video_game_controversy

older friend or direct purchase through the Internet. Hence, even though the ESRB does a relatively good job in rating video games, it can do little to safeguard or prevent children from gaining access to questionable content. Besides, whose responsibility is it to enforce under-age purchases? Such questions have no doubt prompted the introduction of the Family Entertainment Protection Act, where approval from Congress is sought to allow the FTC to:

1. Conduct and publicize the results of an annual secret audit of businesses to determine how frequently minors who attempt to purchase video games with a Mature, Adults-Only, or Rating Pending rating are able to do so successfully; and

2. Conduct an investigation into embedded content in video games that can be accessed through a keystroke combination, pass-code, or other technological means to estimate certain data about video games with embedded content. (Clinton, 2005)

How will the Act (if passed into law) affect VGBL and schools? Will the possession of M(ature) or AO (Adults Only) games by schools or school children be illegal and punishable? We have reached the third Dilemma in VGBL: **What's Right?**

DILEMMA #3: What's Right?

According to the Merriam-Webster online dictionary, 'anarchy' is defined as: (a) a Utopian society of individuals who enjoy complete freedom without government, and (b) absence or denial of any authority or established order; and 'anarchism' is "a political theory holding all forms of governmental authority to be unnecessary and undesirable and advocating a society based on voluntary cooperation and free association of individuals and groups." [Retrieved January 24, 2007, from http://www.m-w.com/"]

The *gamescape* within video games is an anarchistic new world that allows an individual to do whatever he or she wishes, thus offering "complete freedom without government." In comparison, the real world simply offers abundant restriction and rules. For children, the world of video game is one without parents' nagging, and one where they reign supreme! There is no law in the gamescape, except the physical laws built in by programmers. There are no moral values whatsoever, except the views and opinions of the game writer(s).

Example: If you obey the laws of the game world, you will do well and reach the happy ending as intended; if you challenge the values of the game world, then you will likely lose or have a bad time. For example, in KoTOR, you learn the code of Jedi, and how to progress in the game from a Jedi Apprentice to a Master. If you disobey the Jedi code, or ignore their teaching willfully, you will not succeed in your training, nor arrive at the ideal ending. In another word, you have turned to the 'dark side.'

Conclusion: If one of the strongest teaching points of the video games is immediate feedback, who dictates what types of reinforcement the player gets, and at

what time? Proponents of video games have argued that this is the main reason for VGBL, but from the perspective of the game designers, that would be the last thing on their minds (see Hopson, 2006). A good game designer's task is to 'hook' players with the game and to draw them deeper and deeper into the 'story' relentlessly, so that when they finally stop, the tension is released as a 'high.' This is not unlike the dark art of 'getting high' through drugs, just much more sophisticated. For now, the reinforcements are there solely to teach and ensure correct 'button meshing' for the execution of 'special kills.' There is no other consciousness (if I may put it that way) in the game, except the collective mind of the story tellers/programmers/script writers (i.e., the programmed instruction). Successful video games that have sold by the millions of copies have achieved their purpose: successfully reinforcing the gameplay mechanism in the minds and muscles of millions of players, regardless of their upbringing, socio-economic status, genetic make-ups, or moral values. This is why correlation studies trying to link violent crimes with video games appear to confirm the link, yet cannot satisfactorily explain why millions of players do not turn into killers overnight (c.f., similar scenarios were explored in *Resident Evil*, and *Dead Rising*).

8.3.2.1 Moral Development of Children

C. S. Lewis believed that man cannot escape making moral judgments because "every action presupposes a goal toward which the actor acts, and the goal (no matter how clinically it is expressed) represents a judgment of value" (West, 1996). Hence, we all make choices — right/wrong, good/evil — based on our scale of moral reasoning. In this information age, moral development is of particular importance because the advent of Internet, online chatting, file-sharing, and video games are giving rise to rampant hacking, software piracy, copyright infringements, irresponsible speech, and other 'creative' *immoral* possibilities (Willard, 1997). Without a strong moral foundation, many young people will fall prey to the snare of immoral decisions without even recognizing the dangers of crossing the line: "I am not hurting anyone by downloading these files…" As researchers, educators, and parents, our moral duty is to help children develop acceptable moral values likely to help them function as *socially responsible* citizens of the nation and world. I will attempt to discuss this by restricting the discussion below to just two samplings of moral development theories: (1) social domain theory, a modern view, and (2) moral development theory, a classical view.

8.3.2.1.1 Social Domain Theory

Social domain theory (Smetana, 1999) suggests that a child constructs his/her social knowledge (including morality) through social interactions with others, including parents, teachers, and peers. Parents play an important role in the child's

moral development, because they can facilitate that process through the mechanism of affective parent-child interaction. Hence, many psychologists advocate parent involvement to co-view television and co-play video games with their children. However, this is not always possible. One important factor could be the omission of a public education about risks associated with currently available Commercial Off-The-Shelves (COTS) video games (Anderson, 2004). Many parents simply do not know what their children are playing behind closed doors or at an older friend's house. One nationwide study revealed that 68% of underage teenagers were able to purchase M(ature) rated video games from retailers (FTC, 2004). Another study showed some 12% of children (3rd through 12th grades) reported they willfully played video games (at home and elsewhere) that they knew their parents would not have approved.

8.3.2.1.2 Stages in Moral Development

Kohlberg's moral development theory (1981) is not based on maturation and social development, but is based on people's levels of thinking and solving a moral dilemma; that is, a person's moral viewpoint will expand (progress) when he or she engages in discussion and debates with people around him/her. It is considered very difficult to 'jump' stages because each successive stage builds upon the moral reasoning of earlier stages. Kohlberg did not think people would regress in their progress through the stages. His model of moral development may be presented as six consecutive and progressive stages as shown in Table 8.1.

Table 8.1 Stages of Moral Development According to Kohlberg (1981)

Exhibit by	Child	Adolescent	Adult
Level 1 (Pre-Conventional)			
1. Obedience and punishment orientation	✓	✓	✓
2. Self-interest orientation	✓	✓	✓
(What's in it for me?)			
Level 2 (Conventional)			
3. Interpersonal accord and conformity		✓	✓
(The good boy/good girl attitude)			
4. Authority and social-order maintaining orientation		✓	✓
(Law and order morality)			
Level 3 (Post-Conventional)			
5. Social contract orientation			✓
6. Universal ethical principles			✓
(Principled conscience)			

Typically, the *pre-conventional* level of moral reasoning is exhibited by children, the *conventional* level of reasoning by adolescents and the *post-conventional* level by adults. (It is possible to find adults who exhibit lower level reasoning, if they did not progress very far in moral development.) In Stage 1, the child assumes everyone else's moral reasoning is the same as his or hers. Furthermore, the degree of 'wrong' is directly related to the severity of the 'punishment' received; hence, if someone gets away without punishment consistently, the interpretation would be the action is morally acceptable. In Stage 2, the child is interested in meeting the needs of others so long as there is something in it for him/her. Hence: "What's in it for me?" In Stage 3, the adolescent recognizes social roles and tries to fit into those to meet other people's expectations (to be a good boy/girl) and to remain in good social standing. In stage 4, the adolescent or adult will feel the increasing need to obey laws and uphold society conventions to ensure the society functions well. In Stage 5, the person values human options and human rights, and recognizes that laws are social contracts (the basis of democracy). Stage 6 remains a theoretical stage based upon universal ethical principles and abstract reasoning.

Having described the six stages of Kohlberg's moral development model, what implications may one draw regarding children playing violent (or objectionable) video games? We have found the 4th Dilemma of VGBL: **Can video games affect the moral development of children?**

DILEMMA #4: Can Video Games Affect the Moral Development of Children?

Children's moral development is dependent on social interactions and also in the type of moral dilemmas they must experience and resolve. The best way to facilitate moral reasoning is for parents and teachers or other authority figures to guide and model acceptable and expected moral behaviors. When a child is allowed to remain in the game world for a long period of time, his or her moral reasoning will be shaped by the moral values of characters encountered within the game (including the storywriter, the gamers' constant NPC companions, or the online game guilds). Many player characters will be evil characters meant to advance the storyline, but that inadvertently exert influence on the moral development of children.

Examples:

Stage 1: For children in this level of moral reasoning, morality is tied to the amount and severity of punishment received. So if a gangster should get away from punishment when committing a crime, then it must not be morality wrong, or at least must be morally permissible. Perhaps the hidden message is "you can do it, just don't get caught!" If these children should get their hands on such video games (and we know they can), what are now considered as heinous crimes (in the eyes of society) will no longer have the same 'heinousness' to them among those

in younger generation because they will have been raised with a different set of moral values than their elders: namely parents, teachers, and other authority figures.

Stage 2: Children at level 2 of Kohlberg's moral reasoning are also at risk because of "what's in it for me?" thinking. For example, if a video game rewards a player with 500 experience points for stealing a car, and an additional 500 points for killing the policeman who come after him/her, the player will go for the combination of stealing the car *and* killing the policeman to get maximum experience points and reach the higher game levels faster. Hence, they are rewarded for making a morally evil decision.

Stage 3: Adolescents in this stage of Kohlberg's scheme may appear normal, do their homework on time, fulfill their duties, and behave well (i.e., be good boys/good girls) so that they can get to their video games (often set up as reward systems by parents for good behaviors). It's just like playing video game: if I do these steps, I can get those 500 points! Because social conformity works both ways, they will also try to be part of the 'in-crowd' and play whatever video games their best friends are playing. With increasing availability of network-games and Massive Multiplayer Online Games (MMOGs), the online guild (or pack) of players tend to influence one another with whatever moral reasoning they have attained collectively so far. Some of the game guilds are not unlike mobs, as they often organize 'raids' and take great pride in annihilating other players' guilds.

Stage 4: Adolescents in stage 4 of Kohlberg's model have an increasing need to uphold laws and obey societal conventions. However, if they have grown up playing video games, they would have about a decade worth of training (recall the '10-year rule' in making a chess grandmaster). By now, they would think and behave as citizens to the *game world*, and see the real world as a *meta-gamescape*. Who is to say which world is more real? (The scenario has been depicted in the *Matrix* trilogy). If gamers spend more than half of their waking hours in the gamescape, will they not lose themselves in it? (Many soldiers who have returned from a war zone after spending many months there experienced a similar social adjustment problem. School shooting incidents at Columbine and Virginia Tech similarly revealed student-gunmen who had allegedly practiced the "shooting rampage" using virtual worlds first, before crossing over to "reality.") The laws and societal conventions they know best are the ones they lived — the ones presented in their games.

Conclusion: Game developers have moral and social responsibilities to see that their video game worlds uphold the same laws and social values as the real world. It is not the violence in games that are questionable, but the subliminal moral values (good vs. evil) being taught in association with the violence.

8.4 In A Galaxy Far, Far, Away…

Evil, to some people, is the root of violence. To others, it is something or someone that brings sorrow, distress, calamity, suffering, misfortune, or wrongdoing. There are also those who believe evil to be a cosmic driving force that gives rise to various evildoings in society — much like the 'dark side' of the force depicted in the Star Wars universe.

Are young children susceptible to the forces of evil? Take Anakin Skywalker of the *Star Wars Prequel Trilogy*[14] (Lucas, 1999, 2002, 2005) for example. He seemed to have it all: brilliant, sharp, adventurous, passionate, even identified to be the Chosen One. And yet, what happened to him? Young Anakin did become Darth Vader. Over the years, the changes in his thinking process were so gradual that it was almost imperceptible; and no one around him knew what to look for, or where to begin.

The dark side is dangerous because it corrupts whatever it touches. In the Prequel, the Sith Lord (Darth Sidious), who represented the ultimate embodiment of the Dark Side, was able to prevail against the Jedi Council because:

1. he is exceedingly resourceful and powerful;
2. he was knowledgeable — he did his research and understood his opponents;
3. he was a deceiver — through the guise of Palpatine, Darth Sidious was able to conceal his existence from the Jedi Council. He also pretended to be on the verge of death when fighting the Jedi Master, Windu, and incited Anakin to help him;
4. he knew where and how to strike — Darth Sidious manipulated Anakin's emotion for Padmé to its evil end,
5. people who were working for the dark side might not realize they were being used — Count Duku did not think he was expendable, and the Separatists thought they had found an ally;
6. weaker beings might not even realize the insidious scheme — the Clone War was part of a bigger, insidious plan; and
7. the dark 'power' is extremely addictive — after Anakin tried it a few times, it became very difficult to break free.

Further, by the time the dark side reveals itself, it is often too late: The Jedi Temple has been torched, and all the younglings are dead. Who might the Sith Lords be in our 'universe'? While their identities are likely to be well-hidden, one telltale sign is that they tend to target the weak: the children.

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[14] Star Wars: Episode I, II, and III are commonly known as the Prequel Trilogy, while Star Wars: Episode IV, V, VI are known as the Original Trilogy.

8.4.1 Marketing to Children

Because children's mental faculties have yet to become fully developed, they lack the ability to decide or control their course of actions (Wabitsch, 2006). The onus thus falls on the parents and other adults around them to provide the necessary advice, example, teaching, and life-style that will groom the child into a socially responsible adult. Speaking against the marketing of unhealthy foods to children (that resulted in child obesity), McGinnis and colleagues (2006) underscore the need for greater social responsibility: "Creating an environment in which children in the United States grow up healthy should be a high priority for the nation. Yet, the prevailing pattern of food and beverage marketing to children in America represents, at best, a missed opportunity, and at worst, a direct threat to the health prospects of the next generation" (p. 1). The same can be said about the marketing of unhealthy games to children, and the need for social responsibility to create a protected environment for a healthy development of moral values in our children.

According to the American Psychological Association (APA), the advertising industry spent some 12 billion dollars yearly marketing to children through advertisements placed on television and the Internet (Dittman, 2004). It should be no surprise that the advertising industry's latest stomping ground is to be video games (Mehta, 2003; Wong, 2005). Their intention is to turn every object within a video game into a product (i.e. *'productization'*), such as apparels, soda cans, and billboards, to be used for branding and advertisement. Because advertising to children is so effective and essential to survival of the advertising industry, some marketing companies have learned to tap into child psychology principles to fine-tune their marketing strategies. Others simply hire a professional psychologist as their consumer market consultant to do the job more effectively. While there was an outcry from some psychologists who believed this practice to be unethical because it may cause psychological wounds to children (Clay, 2000), others are happy to work with the advertising firms because there is good money to be made. ("What's in it for me?") This prompted the APA to set up a task force to look into the matter (a report of the task force is available online[15]). However, just like what happened in the attempt to regulate sales of violent video games to minors, any suggestions to regulate the ethics of fellow psychologists has quickly been labeled as unconstitutional.

8.4.1.1 Fast Foods, Video Games

Massive campaigns to advertise to children can also be found in other industries, such as fast foods. Perhaps by examining the events that are happening in the fast food industry we can foresee what may eventually take place in the video games

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[15] http://www.apa.org/monitor/jun04/apatask.html

industry. Somewhat similar to video games, fast food companies have likewise associated their products with *'fun'* ('happy' meals). Despite medical studies that consistently demonstrate strong associations between fast food consumption and obesity in children (Bowman, Gortmaker, Ebbeling, Pereira, & Ludwig, 2003), the fast food industry has always maintained a position that the industry is blameless and that their products may not contribute to obesity at all (Brownell, 2004). Brownell pointed out that the fast food companies then "cast themselves as victims of food activism and decry attempts to curb business as usual." Such response only led to increased talks about regulating advertisement of fast food to children; and in extreme cases, the complete banning of fast food sales in certain towns: The banning of the use of trans-fatty oil in fast food chain in the state of New York is one such example. All of these incidents reminiscent of the uprising in protests against sales of unhealthy video games to minors.

The FTC and the Department of Health and Human Services (DHHS) finally issued a joint report (2006a), urging the food industry to adopt responsible marketing strategies to help fight childhood obesity. While they recognized that childhood obesity may be caused by many factors; the FTC and DHHS also believed responsible marketing would play a positive role in improving children's diets and exercise behavior. The FTC also indicated that it would monitor industry efforts more closely (FTC, 2006a), although it remains to be seen if the fast food industry will mend their ways.

One reporter claimed (Donahue, 2001), "They make this junk because people buy it." Whereas a more sympathetic Schlosser (2001) describes the *dark side* of the fast food industry in the following manner: "The executives who run the <u>*fast food*</u> industry are not bad men. They are businessmen. They will sell <u>*free-range, organic, grass-fed hamburgers*</u> if you demand it. They will sell **whatever** sells at a profit" (p. 269). The same quote can be applied to video games with a few modifications: "The executives who run the <u>*video games*</u> industry are not bad men. They are businessmen. They will sell <u>*wholesome, educational, and morally good video games*</u> if you demand it. They will sell **whatever** sells at a profit." [*italics* mine] One has to wonder, will gamers ever make the demand for wholesome games?

8.4.1.2 They Make This Junk…

If you are wondering about the connections between the fast food industry and the video games industry, consider this: Many video games are both fun and good. Some are suitable for people of all ages, while others are targeted towards older teens, and even adults. And yes, some video games are just plain junk! Furthermore, the video game industry will continue to produce this junk if people demand it, and continue to buy it. Every game in the Grand Theft Auto (GTA) series turned out to be a best-seller; there were more than enough demands shown and, of course, money was made. In another study, Hanninger, Ryan, and Thompson, (2004) found video games to overwhelmingly reward players for destructive be-

haviors: destroying objects (46%), injuring non-player characters (NPCs) (90%), and killing (69%). Some 54% of the games depicts Xenocide (or killing of aliens); and 63%, homicide. No wonder researchers were alarmed!

Massive Multiplayer Online Games (MMOGs), such as Sims, were once considered an innovative game genre that promotes social interactions. Because many MMOGs allow gamers the freedom to customize their online appearance by species, race, color, gender, shape and size; this enables gamers in holding different perspectives in gameplay as well as the freedom to align with one another to form social alliances, such as factions, or guilds. In theory, such flexibility in perspective ought to promote open-mindedness, patience, and tolerance among players. Instead, because MMOGs encouraged player-versus-player (PvP) activity, this has resulted in warring guilds organizing killing raids in attempts to annihilate one another. Gamers who condemn warring activity in the world today have little moral defense in supporting and encouraging the sales of ultra-violent video games that promote genocide, or worse, targeting their sale to children.

Many industries are increasingly looking to pay for in-game advertisement (Associated Press, 2007) to promote their products. It may be a matter of time before some industries decide to pay for the production of a 'serious game' to teach children about certain ideologies, such as the value of 'happy meals,' or 'diet Pepsi,' or pizza, or killing infidels? Right now, in-game advertisements already include deodorant (Associated Press, 2007), musical bands (Stuart, 2007), sport shoes, cigarettes, and alcohol (beer). More will find their ways into video games because the *gamescapes* remain unregulated by the FTC. If video games should ever become protected as 'free speech' under the First Amendment (that's what the industry and retailers want), it will be very difficult to regulate the advertisements in video games because they will become part of a protected 'free speech!' This could liberate 'obscenity' and other 'technicalities' that are currently ruled to be unprotected by the First Amendment. A worse scenario would be that the advertising industry eventually become the Sith Lord behind video game media, and gamers would find more 'advertisement pop ups' than those on an AOL browser. The dark side will stop at nothing to achieve personal gain. Now, if you worked for them, what would you do?

8.5 Rating Video Games

The *'messages'* contained in the distributed media (e.g., television, Internet, and video game) have always been the foci of media controversies. Because it is possible for indiscriminant free speech to stir up revolts and social unrests, presenting a fair and balanced view has been a longstanding standard in media making in many countries. For this reason, media rating systems have been created by ways of government censorship or industrial self-regulation, with the intent to balance freedom of speech with peacekeeping, for the purpose of greater social good. It

should be noted that many countries in the world have their own independent video game rating systems. Not only are some countries more stringent in rating video games than others, they will also not hesitate to ban a video game that they considered inappropriate regardless of its rating.

In the U.S., the ESRB has assume the responsibility of (self-) regulating the video games sold in the country so as to avert government censorship. The ESRB rating system actually does a remarkable job in checking for 'problematic' contents, including: animated blood, realistic blood, mutilated body parts (gore), cartoon violence, fantasy violence, intense violence, profanity and sexual references, strong language, strong lyrics in music, comic mischief, crude bathroom humor, mature humor, reference to and use of tobacco products / drug / alcohol, simulated gambling, real gambling, partial nudity, full nudity, sexual violence, sexual acts, and suggestive themes. Three categories may be directly applied to VGBL: adult assistant need (early childhood), informational, and edutainment. (More information can be found on the ESRB Web site, at http://www.esrb.org)

Even though the ESRB rating system is rather comprehensive and did a good job in rating *current* video games, it cannot be used as a litmus test for VGBL because it faces constant challenges in the grey areas — due to the lack of appropriate descriptors or categories. In the years to come, it is foreseeable that many more categories will need to be added. Because game makers continue to push against the edge of the envelope, some of the latest controversial materials have managed to slip through the cracks of an aging ESRB system. The question then comes down to: Should some of these categories be expanded?

Take same-sex relationships for example. No doubt some parents may be shocked to learn that some 'T'(een) rated video games already depicted same-sex relationships (e.g., *Bully, Jade Empire, Sims 2*), same-sex marriages and even sex slavery (e.g., *Temple of Elemental Evil*). As the debate to legalize same-sex marriage continues to rage across the country, would adding it or not adding it as a category fuel the already heated debate? Logically, there are more advantages to both camps if a separate category is created for video games containing same-sex references in that those who are interested can seek out these games, while others can avoid them. In that way, players would know what 'contents' to expect and parents would feel that they could make better informed decisions, and not be shocked by any surprises.

8.5.1 A Failing Scheme

Not all video games available in the U.S. can be found in the ESRB rating database. Because some video games have not been submitted for rating by ESRB, blame should not be placed on the Board for inappropriate materials in these cases. Nevertheless, this highlights a looming crisis because publishers of 'controversial' video games are able to circumvent ESRB entirely by releasing the video

games online. While amateur and independent video game makers may have chosen this route for one reason or another, video game developers with extremist ideologies will do so deliberately and in addition, offer the game for free to increase distribution.

In one example, the developer of *JFK: Reloaded* even put together prize money to increase sales and publicity. According to Wikipedia, the winner of the "*JFK: Reload* shooting accuracy competition" allegedly received $10,000 for his or her effort! Other examples of unrated controversial games that are available online include the Islamogames discussed earlier, the *Super Columbine Massacre RPG*[16] (based on the Columbine High School massacre), and the latest *VTech Rampage*[17] (based on the Virginia Tech massacre).

These disturbing trends bring to mind the collapse of the Hays Code[18] (the first Motion Picture rating system) in 1967, when distributors blatantly ignored the then industry-wide motion picture Production Code (social contract) to release controversial films. It seems the ESRB may be in danger of a similar fate. Should such controversies continue to escalate in the coming years, it is likely that public outcry will force the government into actions to eventually impose certain regulatory measures.

According to the ESRB's Website, the organization does not currently "have the authority to enforce its ratings at the retail level."[19] It should come as no surprise that the latest 'Undercover Shop' study by FTC (2006b) revealed that 63% of children aged 13-17 were able to purchase 'M'(ature) rated video games at a local/regional store even when unaccompanied by an adult. Certainly public education about the ESRB rating and the risks of some of the video games is in order. It may be time for the ESRB to consider introducing an expanded, improved, and clearly enforceable rating system, maybe even seek help from the government for enforcement.

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[16] "Super Columbine Massacre RPG" depicts the players as the two shooters in the Columbine school shooting. The author believed this is his way to preserve history by making the game, and distribute it freely as a 'social documentary.' The game was not submitted to ESRB for rating but was self-rated as 'M'(ature). Since its debut on the author's web site, the game has been downloaded more than 100, 000 times. It is not known how many young children have downloaded the game for play.

[17] "VTech Rampage" is an online game about the Virginia Tech shooting. It rose to controversy because the game maker posted an online note stating he would only remove the game from circulation, and even issue an apology for making it, in exchange for certain amount of "donation."

[18] In 1967, the Hays Code was finally replaced by the Motion Picture Association of America (MPAA) rating system, which is less stringent in moral code.

[19] See the section: "Do retailers support and enforce the ESRB rating system?" Available at ESRB's FAQ site: http://www.esrb.org/ratings/faq.jsp#21

8.5.2 Independent Rating System

If video games (commercially or independently made) are to have a future in VGBL within the public school classrooms, then the issue of rating inadequacies must be addressed. Another alternative would be to set up an independent VGBL rating board to evaluate and review video games for the VGBL market, based on a set of agreed upon educational criteria and/or moral guidelines. While the definition of 'morality' is also wrought with ambiguity (Gert, 2005), it is hopefully less controversial when applied in the case of public education or P-12 children in general. One independent rating board, the United States Conference of Catholic Bishops' ***Office for Film and Broadcasting*** (OFB), currently rates movies based on overall 'moral tone' of the films. (Note: The OFB does not rate video games at the moment.) The new rating board may be set up with the help of a consortium of organizations to create an online rating database[20] for VGBL (or serious games), complete with suggestions on how the video games may be used in a learning situation or a classroom setting.

The worse that can happen is for the game publishers to turn a deaf ear to the educators' pleas for assistance in making games that are suitable for VGBL:

> "Academic interest in games has risen quickly over the past decade, but the games
> industry has never shown a similar interest in academic work. Every year there are books,
> journals, and conferences dedicated to studying games and how people play them, but
> most games professionals never read this work nor attend these conferences." (Hopson,
> 2006)

Is it already too late? Should educators and those interested in making VGBL a reality seek other forms and sources of help?

8.5.2.1 What Kind Of Games Are We Talking About?

To this point, I have talked about video games through a monolithic approach, intentionally ignoring the many ways video games may be categorized (e.g., through game genres, game ratings, and target audiences). Proponents of video games usually chide those who condemned games for their violence or for treating video games in a monolithic manner. Truly, because there are so many different types and genres of games, not all games are bad. Yet, these proponents have tended to treat all video games (monolithically) as though they are good for learning, even proving their points by introducing controversial games in schools as if they have no adverse effects whatsoever. Some have even claimed that it is about time for evil games to be made. Truly, not *all* games are good, either! For example, it would be very difficult to use a first person shooter game (such as Halo, or Doom)

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[20]   An   example   is   the   database   at   Social   Impact   Games,   available   at
http://www.socialimpactgames.com/

directly — without lots of modification — in a classroom for learning simply because it would become a distraction to have to shoot a few humans, or to destroy a few houses every few minutes of the lesson. Remember that without doing so, there is no hope of 'level ups' for the players (using the game's original setting)!

Of course, this does not mean that COTS games are not suitable for VGBL *at all*. Game *modding* remains a viable though time consuming way to retrofit COTS games for VGBL. In education, there have always been sporadic reports about COTS games (e.g., *Civilizations*, *Age of Mythology*, *Caesar,* and *Sims City*) that were successfully adapted for use in classroom settings. Although limited time in classrooms tended to demand that much of the game's contents must be skipped over to fit the most important parts within lesson time limits. Even though hand-held games may not fit into classroom schedules at present, they can still be highly educational and fun to play after school. Examples include: *Brain Age*, *Hotel Dusk: Room 512*, and *Pogo Island* for Nintendo DS. The new Nintendo Wii console games which make use of the innovative Wii remote controller also hold great potential for VGBL.

However, for majority of the COTS video games, classroom use could be like trying to fit a square peg in a round hole; that is, they are not suitable for VGBL *'out-of-the-box.'* President of FAS, Henry Kelly, affirmed that "popular games such as Electronic Arts' *Madden NFL 2007* football title or *Tony Hawk's Underground* skate-boarding games won't help. The games would have to be created and evaluated with the goal of raising achievement" (CBC News, 2006). Clearly, researchers are interested in a new genre of video games that takes full advantage of the affordances of video games to maximize learning possibilities. Much research will be needed to find out what the new genre will be like. Those currently engaged in serious games design are likely to be the ones who may offer some insight into this. Thus far, the FAS has showcased several games developed for this purpose, including *Immune Attack*, *Discover Babylon,* and *Multi Casualty Incident Responder*.

Much has to change in the classrooms to make way for VGBL. In the years to come, one can probably expect sweeping curriculum changes to make way for larger blocks of learning time that utilizes video games. Likewise, we can also expect changes in the interactive story-telling style of the video games to include more 'real life' learning skills, and hopefully, more widely agreed upon moral values. As the industry gradually sees more game designers, there will hopeful be more opportunities for academics to work together with designers toward achieving this goal. Academic researchers who are already working on video game research are likely to report new findings in the near future that may help steer the future directions of VGBL.

8.6 Conclusion

Video games are but a tool, and as such can be used for good and evil (Gee, 2005). But with enough knowledge and motivation, it becomes all too easy for a designer (or publisher) to demonize a game and allow players to: practice flying airplane into the World Trade Center, set off Holocaust, kidnap 15 year-old boys, practice Black Slavery, re-enact heinous crimes, or engage in any other evil acts. As Prensky (2001b) pointed out, "we have seen their formidable power used for evil, it is our duty and obligation to turn these same powerful, learning tools to as many good and positive uses as possible." Instead of spending money to research how to market to human desires, advertising film and game publishers should be responsible for helping parents research means to make interesting video games that will teach good, moral, social values instead of violence and sexual promiscuity.

From a learning perspective, it would be preferably that video games created for VGBL allowed a certain degree of flexibility. It is important that video games allow not only the exploration of the physical gamescape, but also the mind and the heart. The teaching of morality is important for young children, if we want to have an orderly society. Video games should teach critical thinking skills, and present moral dilemmas so that our children can be guided through their moral development with immediate feedback from pedagogic agents such as teachers and parents. Several important features are sorely lacking in today's video games:

- **Allowing players the freedom of choice** — to overtly teach the young ones right from wrong and showing consequence as they would be in reality is highly imperative. Some games have special points which can affect dice roll results or be used for players' character improvement. Superhero games (such as *DC Heroes* and *Marvel Super-Heroes*) encourage players to behave heroically and morally by awarding special points to game actions.
- **Allowing parental control in the level of violence** — Adding a 'no-overwrite' violence level selector, or slider, should become a standard feature. The new Xbox 360, for example, comes with a parental lock that limits the amount of blood and gore based on the ESRB game ratings.
- **Reflecting the natural/societal law and order** — A great example is the game, *Fable*, where the player character's physical features will change according to his/her actions (good or evil) in the game. Such approach reflects the natural and societal law that every action will have its consequence. Even though one may argue that in a real world the actions may not be reflected in the physical features of a person, it certainly can affect what goes on inside (the heart of a man as well as the alter-ego of the player in the game).

8.6.1 Epilogue: Which Side Are You On?

In the Star Wars movies, the portrayal of 'good versus evil' (i.e., 'a light side versus a dark side') was intentionally clear-cut. Even though key characters might 'cross over' from one side to the other, viewers tended to have a good idea about which side of the force these characters embraced. As depicted in the Prequel Trilogy, young Anakin Skywalker was first introduced to the power of the dark side when he discovered strong emotions brought on by his love for Padmé and the murder of his mother. Despite the strict training of a Jedi padawan, he found it increasingly difficult to detach himself from his emotions. His close relationship with Palpatine only served to ensure his fall, as his 'mentor' made doubly sure that the youth received sufficient exposure to the dark side to be 'hooked' or 'turned.' Step-by-step, the Sith Lord tightened the noose around Anakin's neck, and squeezed out the last remnant of light in him. When he finally failed to save all whom he loved, Anakin was left with nothing but dark despair to embrace (i.e., the hatred and power of the dark side). In other words, he became a hapless pawn of the dark side of the Force. Because of the unusual timing of the series (with the 'ending' shown before the beginning), viewers already knew that Anakin would become Darth Vader, and hence they took on the role of passive observers as the storyteller relayed the fate of Anakin.

In comparison, players of the Star Wars series of video games are much more engaged. In the first few video games (e.g. *Jedi Academy*, *Jedi Knights*), players started off as padawans who were forced to overcome many obstacles in order to become Jedi Knights (i.e., a choiceless playing on the light side). Due to demands from the players, later productions would allow players to choose sides. For example, in *Star Wars Galaxy*, players may choose at the onset to sign up as a member of the Rebels or the Republic. Out of the many *Star Wars* video games, the two-part series known as *Knights of the Old Republic* (KoTOR) I and II were the most fascinating. Set in a time thousands of years before the birth of Anakin, the games were crafted in such a way that every choice made by the player would influence the light/dark force points received. The ability to choose sides is obviously much desired by many players, as both games went on to win many accolades, including "Best Game of the Year" awards. Compared with many video games of today, KotORs breadth and depth are commendable and may serve as early examples for VGBL.

Video games have become a very powerful influence in many people lives because of the number of hours they devote to playing them. Is there really a *Dark Side* to video games? What effects does this Dark Side have on young minds? Just as the Jedi Masters failed to detect the influence of the Dark Side on young Anakin until it was too late, it is possible that the same influence is at work to seduce our young people in embracing the darker side of life. However, blaming undesirable behaviors of youths on video games is just as myopic as shifting the re-

sponsibility onto parents to regulate the playing habits of youths based on game ratings. The responsibility lies with both the industry and families.

A failure to see the dark side of video games can lead to youth delinquencies, and eventually, other larger societal issues. On the other hand, the acknowledgment of the dark side may help researchers and educators to better frame their studies and issue appropriate recommendations for remediation and change. As educators, it is our calling and duty to educate and shape young minds who will, one day, lead our society. Hence, we have the responsibility to carefully evaluate and consider the effects of video games on behalf of the children, *not only* for learning but also for living moral lives. The influence of the dark side of video games deserves the attention of researchers, psychologists, educators, and policy-makers.

The future of our children may well teeter on the choices we made. No doubt, the lure of the dark side is strong, but there is still good in all of us. In the end, Darth Vader chose the light side again to finally bring balance to the Force.

The choice is now yours, which side are you on?

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