

THE UNIVERSITY OF WISCONSIN-EAU CLAIRE

A TALE OF TWO GAMES:
An Intertwining History of Mainstream and Educational Video Games

DEPARTMENT OF HISTORY

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Abstract:

This paper will look at the histories of both mainstream and education games from 1980-2009 along with the way they coincided through popularity, technological advancements, and educational possibilities. Differences between educational and mainstream games will be explained along with popular video games that fit in each definition. This paper will attempt to identify problems related to mainstream and educational games and how society views the two different genera of games. It has been found that mainstream games we well received from the public and their popularity grew as the decades went on. As for educational games, their popularity tended to start off high with each new decade or advancement in technology, but then petered out. Over time it has been hard to convince people over the use of educational gaming, but towards the end of the 2000s decade edutainment made a comeback.

Introduction:

In the late 1970s and early 1980s, video games were created and ultimately turned into one of the most popular modern pastimes and forms of entertainment for kids and young adults. Video game players consistently put money into arcade games in order to compete with friends, get high scores, or pass the time away. As technology advanced into home computers and affordable game consoles the popularity of video games increased. The increase in time spent playing games also brought along various health and social issues. From these issues, one focus has been to question the validity of video games and their recreational and educational value. Are games educational? If yes, then how so? If not, then how can games be made to have educational value for the player?

Video games became an untapped resource of educational instruction and both educators and gaming companies were willing to use games as supplements within schools to educate the youth. As game designers tried to create educational tools, some failed and were criticized harshly while others made great progress. I will be taking a look at the history of video games the history of video games alongside and the history of educational videogames. Video games do not have a long history nor have they had a reputation as being academic or worthwhile. There are still many pieces of information written about video games and/or their place in education, including a few people that have written a collective history spanning the past decades on the topic. While there have been histories written about the gaming industry, very few take into the account of educational games and their effect on both people and the industry. This paper will look at the histories of both mainstream and education games from 1980-2009 along with the way they coincided through popularity, technological advancements, and educational possibilities.

Although video games have a relatively short history gaming companies and technology has changed drastically since the 1980s. Even though there are great changes, many issues with games and educational games have not changed. Beginning early on, mainstream¹ gaming has brought about controversial issues including time-management problems for adolescents, gaming addictions, and violence within video games. Likewise, educational games were questioned early to investigate if players were actually learning. Also, arguments for the benefits of educational games rarely went deeper than the improvement of decision-making skills and hand-eye coordination. Toward the beginning of the history of games there was a split between educational games and mainstream games that never seemed to change. Educational games seemed to be largely made and purchased for computers while popular games were made for video game consoles. Computers included different mainstream games and their use for educational games was always greater than gaming consoles. Through the change in technology and split between mainstream and educational video games, one can begin to understand the two histories and how they are related.

The 1980s: Mainstream Video Games

The 1980s became a sort of golden era for video games in both arcades and at home. During this decade, people saw a shift from spending quarters on arcade games to owning personal computers (PC) and video game consoles². The shift was largely caused due to the rapid change and development in technology. Manufacturers were able to produce technology in smaller sizes and at cheaper rates than ever before. Companies like Apple with their computers

¹ Mainstream gaming refers to games, game systems, and game companies that made games for profit and had little to no attempt in combining education with games. Also, the use of the word "game" will be referring to electronic video games unless otherwise stated.

² A console is a device used to play video games on a TV or projected screen. Examples include a Nintendo Entertainment System, PlayStation, and X-Box.

and Atari with both arcades and consoles dominated much of the video game domain in the early 1980s. Over time, the public poured millions of quarters into arcade games such as Asteroids, Pac-Man, and Donkey Kong.³ It was not until 1985 when Nintendo came out with their Nintendo Entertainment System (NES) that the dynamics started to switch. With the release of the NES, Nintendo dominated the home video game market and become more popular than home computers with games that included Punch-Out, Super Mario, and The Legend of Zelda. Eventually the home console market became a \$600 million dollar market.⁴

Playing video games had become a popular pastime for both children and teens.⁵ Before home consoles were invented arcades and arcade parlors were the main way children played video games. However, to some, video games had become too much of a favorite pastime. .Some communities, like Daytona Beach in 1981, pushed for laws and city ordinances that tried to change or ban arcade parlors.⁶ Parents and concerned citizens claimed that kids spent most of their time and money playing these games. Some claimed that students were showing up late to school and spending all of their lunch money. Along with the time and money spent on games, the content and violence of the games being played was put into question.

In 1982 Surgeon General C. Everett Coup spoke out against video games and the quality of entertainment that children were experiencing. When discussing popular games, Everett said that “Everything is eliminate, kill, destroy.”⁷ Although Everett acknowledged that some games were considered to be educational, he believed that there was little to be learned from games that

Herz, J. C. *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*. Boston: Little, Brown, and Co, 1997.

⁴ AP. “Yeager Leads Video Game Resurgence.” *The Press-Courier*, December 12, 1987, Business section, 8.

⁵ Greenfield, Patricia Marks. *Mind and Media: The Effects of Television, Video Games, and Computers*. Cambridge, Mass: Harvard University Press, 1984.

⁶ AP,. “Parents Seek Video Game Ban.” *Daytona Beach Morning Journal*, June 3, 1981.

⁷ Miranker, C.W. “Surgeon General Raps Video Game.” *Daily Times*, November 10, 1982. 3.

kids actually played. Little did Everett know at the time, but his view on video games would be shared for years to come by both the mainstream media and educators.

Although video games caught a bad reputation by C. Everett Coup and others, there were some who defended video games by claiming that there is good that can come from them. A conference hosted at Harvard University became an arena where teachers, psychologists, and computer designers to tell the positives of playing games. Speakers informed people that videogames helped develop hand-eye coordination in the players. Other positives “include developing inductive reasoning, or drawing generalizations from specific observations; improving one's spatial perceptions, and learning to handle multiple variables that interact simultaneously.”⁸ Regardless of whether or not a particular game was violent, these opinions helped negate those who shared the same ideas as the Surgeon General. To add to the list of positives, the video game industry provided hopes of video games rich in education called edutainment⁹. The word Edutainment was used as early as 1948 by Walt Disney to describe some of his works.¹⁰ Speculation even included that video games fused with edutainment would eventually replace regular video games. Edutainment games, although a good idea that did have a large follow-through, never gained the popularity of mainstream video games in the 1980s.

The mid-1980s saw a shift from arcade play to the home console with the release of the Nintendo Entertainment System by the Nintendo Company. This shift brought many people from the arcade parlors to indoors where kids could play from the comfort of their couch. While playing at home, parents did not have to worry about where their child was or who they were surrounded by while playing in the arcades. Parents, like those in Daytona Beach, did not have

⁸ Butterfield, Fox. “Video Game Specialists Come to Harvard to Praise Pac-Man, Not to bury Him.” *The New York Times*, May 24, 1983.

⁹ The word edutainment describes something that is both entertaining and educational. Before video games, edutainment usually came in the form of a song, book, or movie.

¹⁰ Parker, P. "Definition of Edutainment." Webster's Online Dictionary

to worry as much about where their child's money was going since home consoles and games came with a single purchase. In the late 1980s video game consoles and their games were shadowed by computers for a short period of time. Home computers became popular due to people using them to write, draw, compose music, and keep important documents.¹¹ However, with newer technology and games consistently being made they made resurgence in 1987. Eventually video games became a hot-ticket item for the holidays and the Christmas season brought huge profits to gaming companies.¹² Once again with the popularity of games came a backlash and a series of complaints. The value of entertainment obtained from video games was in question. One group that did the questioning was the National Coalition on Television Violence.

The National Coalition on Television Violence (NCTV) did a study based on the content of the games. In 1988, NCTV found that 83% of Nintendo games incorporated some form of violence.¹³ Due to the new technology and the quality of games, NCTV became worried about the type of violence that children were experiencing while playing games. The organization had fears that playing these violent games could cause children to become desensitized to violence or find violence as an acceptable choice to solving problems. Another issue brought on by video games was childhood obesity. America had started to become a "bigger" population and games became a possible cause. Some felt that video game play had replaced recreational game play outdoors, causing children to exercise less.¹⁴ The new technological pastime began to have reoccurring themes of laziness and violence.

¹¹ AP "Yeager Leads Game Resurgence."

¹² AP . "Video games will be a hit under Christmas trees, as will dolls, toy cars.." *The Deseret News*, November 22, 1989, A section, 17.

¹³ UPI. "Changes Urged In Violent Video Games." *Point Pleasant Register*, November 15, 1988, 7-8.

¹⁴ Weldon, G. "Children Need 'Fitness Education'." *Education Week*, December 06, 1989.

The 1980s were a booming time for the gaming industry. With the shift from game being played in arcade parlors to in the homes allowed people to play without leaving the house. Games changed and became popular. The 1980s saw the introduction of the Nintendo Company's Nintendo Entertainment System and their dominance in the video game industry over home computers. The beginning of video games also brought the beginnings of issues surround games. People worried what would happen to their children as they spent time playing games. How was the violence in video games affecting their kids and how could games be educational?

The 1980s: Educational Video Games

With new technology came hopes of improving ways to teach children both in and out of schools. Video games became a tool that would be used to try to get gamers to learn and have fun. While some games tried to hide the fact that the player was learning, others had no problems advertising their educational value. In the 1980s, thanks to companies like Apple, educators had a chance to use a popular entertainment medium and transfer knowledge to students. Games including teaching elements of history and geography such as "Oregon Trail" and "Where in the World is Carmen Sandiego" turned hopes into realities.

A fairly new and accessible pastime, videogames sparked an interest in educators. In 1982, *The New York Times* ran a letter to the editor expressing the philosophies behind educational games. The author stated that computer-aided education had yet to become popular with people. In fact they questioned how much children actually learned through computers up to that point in time.¹⁵ At that time the author brought up a good request of both schools and the

¹⁵ Bassac, G. "Turn the Blackboard into a Video Game." *The New York Times*, June 16, 1982. Letter to the Editor.

video game companies. The challenge was one that would be investigated by both groups throughout the rest of the decade.

A driving force in improving educational games, Apple had released their Apple I computer in 1976 and their Apple II computer in 1979.¹⁶ These computers represented some of the best technology at that point in time and were a breeding ground for different edutainment games. Although groundbreaking technology the computers could only produce fairly simplistic games. For instance the game “Where in the World is Carmen Sandiego” was created in 1985 and ran on the Apple II and other systems. This game provided information on history and geography throughout the world and provided many learning opportunities for players. Within the game, a criminal named Carmen Sandiego and her villains committed crimes throughout the world. The game itself was popular amongst kids ages eight and up due to the content material involved. The player had to find clues and crime scenes related to history and geography in order to eventually catch the criminals. Players learned many different pieces of information surrounding the social studies content knowledge while looking for criminals. The Carmen Sandiego game is one of the most famous edutainment game franchises that included its own TV show and still has games being published today.

In 1984 Apple released another ground breaking computer series called Macintosh (Mac). The Macintosh computer was the first to successfully use a mouse with a computer screen to control the computer.¹⁷ Prior to this feature many computer functions were done by typing commands into the computer. Along with the mouse feature came greater picture quality and opportunities for making games. One popular edutainment game that was released for

¹⁶ Dernbach, C. "The History of the Apple Macintosh." Mac History. <http://www.mac-history.net/> (accessed November 23, 2011).

¹⁷ Looking for source.

Macintosh computers was Oregon Trail. The game placed the player in the mid-1800s as a traveler along the real Oregon Trail. Players had to make important decisions that would decide whether they would survive the trail or die of a snake bite. Oregon Trail included life-changing options surrounding professions, travel, rationing, purchases, and food sources. Oregon Trail was popular amongst elementary aged children due to its simplicity while having the feeling of being on an adventure. The game gave students an opportunity to not only view what life was like on the actual Oregon trail but also experienced it in the virtual world. The maps were correct as well as the situations like managing food and deciding on how the group should travel. Through the game, players learned management skills along with the history of the Oregon Trail. Similar to Carmen Sandiego, Oregon Trail was well received, well made, and continues to be produced today. Oregon Trail has had over 10 different versions of the game made and has sold over 65 million copies worldwide. These numbers made it the most widely distributed educational game of all time. "Market research done in 2006 found that almost 45 percent of parents with young children knew Oregon Trail, despite the fact that it largely disappeared from the Market in the late '90s" explained columnist Jessica Lussenhop.¹⁸

Apple's line of Apple and Macintosh computers mark a turning point in educational games. Not only were many edutainment games released for these computers, but most edutainment games were released for computers rather than game consoles. It was the computer, not the console that was in school classrooms. Also, computers had an earlier start in building a popular home base installment. Although popularity of gaming would change with the release of the Nintendo Entertainment System in 1985, edutainment largely stayed on the computer. The

¹⁸ Rosenberg, E. "Sally Has Diphtheria: Is Oregon Trail the Greatest Video Game of All Time?." *Atlantic Wire*, January 21, 2011

dominance that computers had over consoles in the edutainment industry was established in the 1980s and never changed.

While reviewing educational games, in 1983 the Associated Press (AP) came out with an article for parents assessing the pros and cons of children who play video games. The article questioned the educational, entertainment, and social value of educational games and was the seventh part in a series written about video games.. On one side the article explained that gamers gained problem solving skills and players became accustomed with the intricacies of computers. The other side argued that the skills learned did not transfer to situations outside of the virtual simulations. Also, few studies had been done on ways that video games were detrimental to educational learning as opposed to enhancing it. As far as entertainment was concerned, the article explained how children are fascinated with games but questioned whether video games contained equal entertainment to physical interaction with people or objects. Socially games could offer conversation topics in the way popular movies or TV shows did. There was also peer pressure to play games. Still, it was also said that organized activities would be a better way to socialize.¹⁹ This article gave the public crucial questions and answers the debate surrounding whether or not video games could be educational. Taking an objective view, the article let the readers make the decision for themselves and offered them information to turn to in the process.

Although the AP took a more neutral stance on the issue, writer Steve Stecklow took the negative approach. In the same year that the AP's article came out, Stecklow complained that the educational value of video games was dismal. A year later in 1984, Stecklow wrote another article about educational video games. Stecklow's article is largely writing from his own opinion; however he had researched video games in the past for his work. Also, throughout his

¹⁹ AP. "Pros vs. cons of video game value." *Anchorage Daily news*, November 12, 1983. Lifestyles, E2.

article he had himself played the games in which he was talking about and interpreted their educational qualities. In his new article he had decided that although games claimed to be more educational, they had not changed fundamentally. Stecklow looked at various Atari games that had been made educational and less violent through use of characters from the popular TV show “The Muppets.” In the article Stecklow explains that Atari took famous games like Frogger and Asteroids and sugarcoated them without changing them to make them appear to be educational. “The fact is, despite claims by some manufacturers, particularly Atari, characters still get blown up and shot down. The only difference is that they seem to bleed less.”²⁰ Even though Atari had tried to change games, this article represented a population of people who were unhappy with the actual changes made to make games more educational and less violent. People wanted real change in games in order to better help kids and were unhappy with what they saw.

At the end of the decade there had been progress made on educational games and the games were still not reaching out to everyone. Thousands of edutainment games were available for the Apple II and other companies joined in on the process. Dr. Elizabeth Loftus, a professor at the University of Washington in Seattle, explained that games created eye-hand coordination, a consistent theme in video game edutainment, but not much else had changed educationally.²¹ Loftus also explained that children became addicted to the simulated worlds because they were more exciting than TV. Loftus and her husband co-wrote the book “Mind at Play: The Psychology of Video Games.” Also a critic of edutainment games, Peter Lewis argues that even if good progress had been made with more colorful screens, complex games, and computer technology, not all children were being marketed to. In his article, Lewis explained that Nintendo claims that 25% of its gamers are girls. However, most of the market that is targeted is

²⁰ Stecklow, Steve. “Video games adding little to education.” *Boca Raton News*, February 05, 1984, 28C.

²¹ Leiwis, P. “The Summer Report: Ex Machina; Child’s Play.” *The New York Times*, August 06, 1989.

eight to fifteen year old boys.²² A large population of gamers was not being focused on in the process of making and selling games. If the video game industry was to truly try to create edutainment for children, they would have needed to create a market for girls as well as boys.

The 1980s saw video games and technology improve by leaps and bounds. While some viewed games as a valuable resource as a learning tool, others felt that games lacked too little educational value. The decade really jump started the edutainment movement for video games and sparked ideas and issues that would last until today. Through tools such as Macintosh computers and the NES, games brought not only positive hopes of a way to educate students, but also negative issues of increasing violence and laziness. The 80s also kicked off the computers prevalent hold on edutainment over gaming consoles. While some consoles tried to create games that were purely educational, a large portion of their edutainment was considered to be remakes of classic games that provided little to no educational value. On the other hand, computer companies produced hundreds of both edutainment games and popular games that provided opportunities for some learning.

1990s: Mainstream Video Games

With the new decade came new issues and possibilities for video games. In the 1990s the Nintendo Company took a dominant hold on the video game industry. Nintendo highly influenced the console's popularity over computer gaming and also managed to beat out its rival competitors like Sega and Sony. Nintendo's gaming systems brought more kids inside to sit in front of the TV to play games. While this provided opportunities for learning to be involved in playing games, much of the attention towards video games was how video games were negatively affecting children.

²²ibid

In the early 1990s many people wondered if video games were becoming too violent for children. While this same idea was presented in the late 1980s, the newer video game consoles were offering more realistic games that children could play. However, with all the questioning done towards video games, there had been relatively few studies done compared to other media outlets like movies and TV. Since there was less scientific research done on negative effects and possible prevention of such effects, different media sources gave “tips” on safe game play. Some tips included limiting playing time, not banning video games from the house, and finding the good in all the chaos of video games.²³ Most importantly, different articles urged parents to understand the video games that their children are playing. Getting parents to understand what games their children were playing may have been the biggest issue of all.

Parents needed to (and still need to) fully understand the games their children played, maybe even play the games themselves. Parents know their children more than anyone else, so before they jumped to conclusion or listened to “experts” parents would have been wise to check out the games for themselves. By understanding the games, parents would have been able to make the right choices when it came to what games the child played and for how long. Parents would have also been able to talk to their children about games and explain why certain games were or were not appropriate for their kids. Most of all, the understanding of video games could have led to a stronger relationship with a child. If a child sees that their parent is taking an interest in their hobby, the child may be more likely to open up to the parent about their hobby. While it cannot be said whether or not parents talked about video games, it is certain that the media did.

There were some issues that people felt came along with the fun of playing video games. People were seeing rates of obesity in children rise in America in the 1990s. Video games were

²³ Langberg, M. “Videogames: Nightmare for parents?” *The Milwaukee Sentinel*, January 03, 1993, 2C.

used as an excuse for the growing rates of unhealthiness in our children. While those claims may not be entirely false, they are not entirely true. Video games were generally sedentary activities in front of TV screens with little need for body movement. With this lack of movement in play children may have received less exercise, but TV watching was largely substituted for video games in children's lives. This means that video games alone were not to blame but rather the changes in technology and entertainment since the early 1900s with the development of radio and television programs. Also, the diets of many Americans had been changing. With more people going to work and less time to prepare family meals, fast food became a quick fix dinner for parents on the way home from work. One could even argue that any form of indoor entertainment or play could be detrimental to children's health since it usually lacks healthy kinesthetic movement. While it was easy to point blame at video games and the claims had validity, it was hard to put all of the blame on one form of entertainment. After all, not all children who played video games did so for a long period of time or gained excessive weight.

Some groups went as far as to say the video games were ruining the eyesight of children. They claimed that all of the focus going into watching the television screen was putting stress on the eyes. Studies had found that between 1992 and 1993 the percentage of students who had eyesight impairments that affected their studies rose between one and two percent.²⁴ The studies had a good argument since the rise in eyesight impairments coincided with the popularity of video games. The commission did say that they had no direct connection between poor eyesight and video games but did not believe that the two events were just a coincidence. Although video games were being scrutinized, there were some people who came to their defense.

While some groups such as the media and even the government claimed that video games had negative effects, Auburn's Steven Silvern claimed otherwise. Professor Silvern explained

²⁴ NYT. "Worsening sight linked to video games." *New Straits Times*, January 27, 1994, Leisure 38.

that video games were just “play.” He felt that video games were fantasy and that children understood this. After studies were completed on children, Silvern also decided that children of the video game generation would be no worse off than the television generation.²⁵ Silvern made a good point since children often substituted TV watching for video games when they had a gaming console. However, in the larger public was the fact that unlike television, children controlled what was happening in the games. This meant that children were controlling the violence and people wondered if this control would seep into the real world.

Since its release in 1994, *Mortal Kombat* and its subsequent games became notorious throughout the gaming industry for its violence and game play. *Mortal Kombat* is a one-on-one fighting game that alongside punching and kicking, includes special moves that allow characters to do moves shoot fireballs, ice beams, acid, and or bombs at their opponents. With every hit a character sheds blood. At the end of a match, the player has the opportunity to make the fighter do a “Fatality” or finishing move. These finishing moves increased the violence in the game by allowing a player to finish off the foe by engulfing him or her in flames, cutting the opponent in half, ripping out the spine, and other opportunities to complete violent actions. With the release of *Mortal Kombat* and other games such as *Doom*²⁶, a newer level of violence was created within the gaming world. These games became the subject of debate within the US House and Senate meetings and also became a large reason as to why the video game industry created its own rating system.

On June 30th 1994 the US House of Representatives met to discuss violence in video games and the possibility of creating a government-enforced rating system for the gaming industry. Congressman Tom Lantos made the argument that “What more horrible lesson to teach a child that to win you have to

²⁵ AP. “Professor: Video games don’t make kids violent.” *The Tuscaloosa News*, August 05, 1991, 7A.

²⁶ *Doom* was a game with satanic imagery in which the player explored dungeons while killing enemies and monsters with guns and knives.

succeed in torturing and killing and mutilating more effectively?”²⁷ Lantos felt that the level of violence in some games was too much for children to handle and that the government needed to act in creating restrictions. However, Lantos’ argument towards what kids were learning from games could also be seen as an issue towards parents letting their kids play these games rather than the issue being the industry’s fault for not censoring itself. Lantos did make the comment that ultimately it was up to the parents to make the final decision. No matter who was at fault, it was decided a rating system on the video game industry would help parents make crucial decisions as to what games their kids could play.

A new issue was brought up to the House with the possibilities of the new “Sega Channel.” Sega Channel was a service that allowed games to be streamed through cable companies and on TVs. Some argued that this service would bring games including Mortal Kombat right into homes and would be ready to be played by children at any time. Mortal Kombat was often used as an example of a violent game because it had been one of the most popular violent games at that point in time. The game had also proved the gaming industry’s capabilities to make games seem more realistic, furthering the issue of violence in games. While streaming violent games into homes was a valid point, Sega Channel President Stanley Thomas was quick to show that there were some preventative measures to this course of action. Thomas explained that Sega Channel had a Password for Parents program that allowed parents to block both specific games and a whole genre of games based on content.²⁸ Sega Channel’s program once again outlined the importance of parental input on the games their children played.

In a testimony by Robert McAfee, President of the American Medical Association stated that while video games and claims of impact of violence may not be fully established, they can be expected.²⁹ Over time many different people considered video game playing to be similar to watching TV and McAfee was no different. He linked over twenty years of studies done on TV

²⁷ United States. *Violence in Video Games: Hearing Before the Subcommittee on Telecommunications and Finance of the Committee on Energy and Commerce, House of Representatives, One Hundred Third Congress, Second Session, June 30, 1994*. Washington: U.S. G.P.O., 1994. Pg 7.

²⁸ Ibid pg 9.

²⁹ Ibid pg 18.

violence to affects that can be created by video games. McAfee pointed out that media contributed significantly to aggressive behavior and attitudes of children, adolescents, and even adults. Also, many children are not able to fully comprehend mature content and ideals, even if they believe they do. Towards the end of his testimony, McAfee explained that young children possessed an instinctive desire to imitate actions which they experienced without knowing if the actions were appropriate. McAfee pointed out many issues and was not alone on the subject matter.

Marcy Kelly, President of Media Scope in California mirrored McAfee's claims. Kelly conducted a study which found that of the kids who participated, 49% of kids preferred to play violent games while only 2% preferred to play edutainment games.³⁰ Kelly also presented issues of the age range of traditional rating systems, criticizing them for broad age ranges like 0-13. Eventually she acknowledges the effort done by the video game industry that led to a quality rating system.

In 1993 a group of companies involved in the gaming collaborated to create a rating system. Game companies Nintendo and Sega connected with distributors like Sears and Toys-R-Us to create a video game rating system that was similar to the movie rating system.³¹ With the backlash from the media, the gaming industry felt that it had to start to police itself before the government imposed its own rating system. Although there were House and Senate meetings to talk about video games and rating systems, the gaming industry became policed by the Entertainment Software Rating Board (ESRB) rating system. The ESRB rating system became legally adopted by the industry, and any companies or games that used the rating system had to

³⁰ Ibid 12

³¹ Andrews, E. "Industry Set to Issue Video Game Ratings As Complaints Rise." *The New York Times*, December 09, 1993, 1-2.

follow its rules and standards. Eventually, many retailers only stocked games that had an ESRB rating in order to keep the public both happy and informed.³²

The ESRB became one of the best and most detailed media rating systems. They created six different levels³³ of ratings and over thirty different “content descriptors.” The ESRB system did not use a limiting method based on numbers of incidents or actions but rather created a system that explained the overall content and feeling of the game. Also, ESRB linked the rating levels with an appropriate age to play the game. Thanks to games like Mortal Kombat that were assessed by the industry and the government, an impressive rating system was put into place. As games changed over time, the ESRB and its rating system was effective in keeping up.

In the 1990s the ESRB effectively changed the rating system and described games with its six levels of ratings and thirty descriptions. By 1999 the issue of children playing games too mature for their age began to rest on the parent. In an article about the ratings system, Sharon King stated that many parents did not know much about the ESRB, and stores often sold or rented³⁴ games to kids that were rated for higher ages.³⁵ King also pointed out that of all the games that the ESRB rated, 70% were rated “E” for everyone and only 7% were rated “M” for mature.³⁶ It was this 7% of games that the ESRB, retailers, and parents began to worry about. In 1999 there began a much larger movement to publicize the ratings system. King mentioned that many rental stores began posting the ratings on walls and both retailers and rental stores stopped renting/selling mature games to kids under the age of 17 without parental consent. Without

³² "ESRB Ratings Guide and Definitions." ESRB.ORG.

³³The levels were: EC for Early Childhood (ages 3 and older), E for Everyone, E 10+ for Everyone 10 and Older, T for Teen (ages 13 and older), M for Mature (ages 17 and older), and AO for Adults Only (ages 18 and older).

³⁴ In 2001 my brother and I, ages 9 and 12, renting Conker's Bad Fur Day from the local rental store. Conker's was rated M and contained vulgar language, gun violence, and adult humor. We now laugh at the fact that we were able to rent such a mature game at a young age, but we also were glad that we were able to handle such content at a young age and be resilient to its possible side effects.

³⁵ King, S. "Video Game Industry Makes Push for Self-Policing." *The New York Times*, October 12, 1999. Technology, 1.

³⁶ IBID, 3.

trying to change their games and style, the video game industry did a much in the 1990s in order to try and right the wrongs that were seen in the public eye. With an effective rating system and retailers on their side, the industry left it up to the parents to make decisions that were best for their children.

1990s: Educational Video Games

Sony and Nintendo brought a huge blow to educational games in 1994 and 1996 respectively. In 1994 Sony released its console system named PlayStation, which over time became to be one of the bestselling console systems. In 1996 Nintendo released its largely popular console called the Nintendo64 (N64).³⁷ These consoles were much more advanced in that they made games seem much more realistic. Rather than two-dimensional characters that seemed like cut-out characters on screen, the games emulated a three-dimensional environment with polygonal shapes and characters. These updates in picture and actual game play let children feel like they were running around in a realist world, not just interacting with pictures moving up, down, left, and right on the TV screen. The new consoles allowed mainstream games to win over the hearts of children and signified a decline in educational games both at home and in the schools.

Even though mainstream games won the hearts of students, in the 1990s educational video games began to be more popular within school systems. There were numerous successful edutainment games such as Number Munchers, MECC Museum Madness, Dinopark Tycoon, and Odell Down Under. Many of these games could be played in classrooms or in computer labs

³⁷ "Company History." Nintendo. <http://www.nintendo.com/corp/history.jsp> (accessed December 01, 2011).

at schools. Some of these games were even made available to the public to purchase and play. While many of these games were a hit with children inside the school setting, the games fell short compared to games playable on the consoles they owned at home. As home consoles continued to develop and advance to meet the consumer requests and demands, edutainment games began to slow their rate of progression.

The new decade brought new technology and, more importantly, new ideas. In 1993 author Warren Leary stated in his article “School Computers Emulate Games to Capture the Attention of Pupils” that a new wave of computers was going to come to schools. He also argued that due to technology becoming cheaper to produce, virtual reality in the classrooms could be a possibility. Leary explained that this would be a major advantage in teaching because “experiencing is better learning than by being told something.”³⁸ He also mentioned that it was important to reach kids through video games since more than 65% of homes with children had video game consoles. This number was also higher than personal computers since consoles were less expensive and more families could afford them.³⁹ Although virtual reality was a good idea for schools, the problem was that it was still too expensive for schools and would be hard to have anywhere near a class-set of virtual reality gear. Virtual reality may not have caught on, but other games did.

The period between 1993 and 1995 became a good year for edutainment with the release of successful games such as MECC Museum Madness. In this game players controlled a boy who walked around a museum, trying to fix or explain various exhibits.⁴⁰ For instance, in a Salem Witch exhibit a girl is accused of being a witch because she created a rainbow inside a

³⁸ Leary, W. “School Computers Emulate Games To Capture the Attention of Pupils.” *The New York Times*, May 25, 1993. 1.

³⁹ IBID 3

⁴⁰ “Museum Madness for PC.” G4TV.com. <http://www.g4tv.com/games/pc/7435/museum-madness/> (accessed October 18, 2011).

house. However, it is up to the player, through a series of obstacles, to show the townspeople that the rainbow was created by light passing through a glass prism. The game included curriculum different courses including science, math, and history. Unlike other games, some schools took time out of the day to show kids how to use and play the game, hoping that students would get involved in playing the game and learning through it. Not many games received the same attention from both teachers and students as MECC Museum Madness; nonetheless there were other successful games in teaching students information.

The games Dinopark Tycoon and Odell Down Under were released between 1993 and 1995. Dinopark allowed students to create their own dinosaur zoo and had to make economical and spacial decisions in order to have their park become successful. Odell Down Under was a game that took place in the ocean near a reef. Students chose a set of fish ranging in size and then swam around to find specific food for that fish while watching out for predators. As students reached enough points or ate enough food, they moved onto a bigger fish. Through this game students learn about the ocean, fish, and biological food chains. Both of these games gained students attention by letting them be creative and fun while learning. Kids liked the idea of owning a Tyrannosaurus-Rex or being able to swim around as a great white shark eating smaller fish. Through these games students were able to enjoy their time spent playing games while gaining new knowledge. These games did not specifically tell students what they were learning, which may be their biggest positives. Rather than telling students they were learning biology through the food chain, students picked up the notion that bigger fish eat smaller fish. These concepts could then be triggered when they were learning the real information through classroom activities and lectures.

Many edutainment games created in the mid-1990s for schools were well received by both teachers and students. Nonetheless, there were a few games that missed their mark. For instance, in a Minnesota school there was a game called “Freedom!” In the game students played as a slave until they freed themselves. Students would have to learn how to read and write until they had enough skills to escape or travel north.⁴¹ While the game itself was fairly accurate and educational, it was targeted to kids too young to be playing such a game. One African American elementary student was offended while playing the game. The student was upset that other students made fun of the characters in the game and felt that he was being thought of as a slave. The white children may not have meant to do any harm, but the fact was that the game itself was inappropriate for the kids and it did not allow them to fully understand how serious the topic they were playing was. Luckily, once the game was removed from the computers, there were still other great games including MECC Museum Madness and Odell Down Under for kids to play.

Many of the edutainment games mentioned from the 1990s and many more were created by the Minnesota Educational Computing Consortium (MECC). While the company itself was founded in 1973⁴² and had targeted Minnesota, by the 1990s it had become a successful edutainment game producer whose games were used all around the country. Although many of its games can be found and downloaded on the internet today, MECC shut down in 1999 officially ending their production of games.⁴³ The end of the MECC Company also signified a standstill with edutainment games in the schools. Despite the fact that mainstream games were consistently being developed and upgraded, edutainment games in the schools were left behind.

⁴¹ NYT. “School’s Computer Game on Slavery Prompts Suit.” *The New York Times*, August 28, 1995.

⁴² “Minnesota Educational Computer Consortium.” Apple Archives. <http://mecc.applearchives.com/> (accessed December 3, 2011).

⁴³ Ibid

2000s: Mainstream Video Games

Each decade mainstream video games and console systems become more advanced and more sought out by the general public. The 2000s did not break this trend and in fact took it to a whole new level. Not only did picture quality and game play improve, but the video game industry brought in the new era of players being able to play over the internet.⁴⁴ These systems not only made video games more realistic to players, but also made these realistic worlds to be played at the same time, in the same game, from any two (or more) points in the world with internet access. Video games during the 2000s completely changed the possibilities for video games and the social interaction between players.

The beginning of the 2000s led to a new “console war” between Sony’s PlayStation 2, Microsoft’s Xbox, and Nintendo’s GameCube. All three had the basic function of playing games, but all three consoles contained different features for the gaming market. The Nintendo GameCube was a small compacted cube-shaped console that played video game disks roughly half the size of a cd or regular game disk. Along with its attempt at shrinking the technology, the GameCube brought newer versions of the classic games that many people loved. Having been around since the mid-1980s, Nintendo had the advantage of having storied franchise games that consumers recognized and played when they were younger. Unfortunately, with the console’s smaller stature came less technological power. The GameCube was weaker in video quality and processing power compared to the other two consoles. Also, its lack of DVD playing capabilities and Nintendo’s focus on families gave it a reputation amongst gamers as the weakest of the three.

⁴⁴ While computer games had been playable online for a period of time before console games, consoles were much more popular for video games and instantly gained a large demographic of video game players.

Sony's PlayStation 2 (PS2) had the advantage of being released the earliest of the three and, like Nintendo, had a large game library and fan base to work with. The PS2 gained a huge home installment since it was released before the Xbox and was more popular than the GameCube. Its capability to play DVDs also gave it the appearance of being an all-around home entertainment system. Also, the PS2 allowed various online/internet functions through a phone jack in the back of the console. Eventually, the PS2 would become the bestselling console ever. Although Sony had the advantage with its sales, it continuously battled out Microsoft's Xbox for sales.

Microsoft became a new player in the video game industry. They had never created a gaming console before and took its chances with the Xbox. The Xbox had similar capabilities to the PS2 when it came to playing games and DVDs; however, the Xbox competed with two new features. The Xbox was the first to contain a hard-drive that players could save information to right in the console. Also, the Xbox contained an Ethernet port that allowed players to have fast internet connect online. Microsoft launched Xbox Live⁴⁵ which allowed players to play against one another online from anywhere in the world. Instantly, Microsoft became a name to be reckoned with within the video game industry.

As consoles and games advanced and became more popular, so did the arguments against video games and the effect violence had on players. Along with violence came a new topic about the way females were portrayed in a male dominated culture. People were still arguing the negative health affects video games had on kids like lack of active play and becoming overweight. These problems were hot-topic issues for the industry, and this time video games were not a new subject media that had not been studied. By the 2000s many studies had been

⁴⁵ Whitten, Marc. "An Open Letter From Xbox Live General Manager Marc Whitten." Xbox.

done and held validity when presented in a Senate hearing in 2006, one which was much like the congressional hearings on video games in 1994.

Professor Briggs of the de Lissa Institute of Early Childhood and Family Studies at the University of South Australia came out with statements in 2000 about the negative sides to playing video games. Briggs had studied children and their attitudes towards play. First, she explained that boys were spending too much time playing video games. She then noted that those who were at the most risk of negative side effects were children who had behavior issues or came from backgrounds of domestic abuse.⁴⁶ Another university lecturer, Hugh Stewart, claimed that “Computer games are a poor substitute for the interactive and physical movement around regular games. Games are important for primary social interaction, physical movement and eye-hand co-ordination that computer games can only approximate.”⁴⁷ While the lack of physical movement is nothing new to the argument, the falsehood of eye-hand co-ordination goes against the previous beliefs that video games help develop these functions.

In addition to issues of violence was the issue of the representation of females and the female body in video games. Since picture quality and the descriptiveness of characters went up, so did the issue of showing such characters in games. Anna-Marie Schleiner makes note of these issues in her article “Does Lara Croft Wear Fake Polygons? Gender and Gender-Role Subversion in Computer Adventure Games.” The PlayStation and PS2 had a successful game series titled Tomb Raider. In this game players played as a female character, Laura Croft that traversed dungeons and archeological sites and battled enemies in a quest for treasure and other goods.

⁴⁶ Thea, W. “Video games no match for old-fashioned fun.” *The Adelaide Advertiser*, December 04, 2000, News 24.

⁴⁷ IBID

While the story and gameplay were much like any other game, the protagonist was a Barbie-shaped female and wore short shorts and a tight white tank top.⁴⁸ With characters being more detailed, people had problems with young boys controlling and watching a busty and scantily-clad women running and jumping around. While Schleiner focused most of her article on the negatives, she did note that there could be one positive taken away from the Tomb Raider series. She explains that while the game was largely created and played by males, Laura Croft was one of the first popular heroines of video games.

2005 and 2006 marked the years of yet another generation of three new video game consoles developed by Nintendo, Sony, and Microsoft. Continuing in the footsteps of the Xbox and Xbox Live, all three consoles⁴⁹ contained online capabilities that allowed players to play one another over the internet. The new consoles brought about a completely new era when examining the social context of playing video games. The arcade era of the 1980s allowed kids to hang out together while playing video games in a large social gathering. While they may not have played on the same machine, friends would play next to each other and wander around the arcade meeting other people. The late 1980s and 1990s brought those kids into the homes to play with only a couple of friends, losing much of the social atmosphere that arcades had. The consoles of the 2000s and their ability for online play brought back greater social capabilities to games, but in a different way.

Whereas arcades created face to face interaction with peers, online play created social interaction through the characters or objects that the player controlled. Over the internet, players could talk to each other both through text and vocal conversations via a headset. Players could once again play and talk with friends and could also play and talk with anyone else playing the game

⁴⁸ Schleiner, M. "Does Lara Croft Wear Fake Polygons? Gender and Gender-Role Subversion in Computer Adventure Games." *Neonardo* 34 (2001).

⁴⁹ The three consoles were the Nintendo Wii, Xbox 360 and PlayStation 3

online. While players could meet new people online and become friends virtually, there were some downsides to the new breakthrough of online play. The freedom to play and talk with other players online also meant the players could do and say what they want within the games. Despite the fact that online play usually contained the same competitive or cooperative goals as regular play, some online players used their character to ruin the fun for others. They did this by purposely ruining the mission or objective of the game causing all other players to lose. Even though this was a minor annoyance, various online games like the Halo and Call of Duty franchises kept record of each player's results and skills. One player causing all others to lose on purpose lowered everyone's statistics and ranking; therefore making people upset and maybe even retaliate.

Vulgar language and actions became rampant during online play. Speaking in their headsets, some players used swear words and racial slurs towards other players. Much of this went on with little sanctions towards rude players other than the ability to block their headsets or the ability of one player to block another player from interacting with them. Some would go as far as to degrading sexual actions⁵⁰ in order to make fun of or humiliate other players. Since there was no way to filter these actions, any game that contained online capabilities came with a warning from the ESRB explaining that "Online interactions not rated by the ESRB."⁵¹ These and the other issues regarding the 2000s wave of gaming prompted congress to take another look at regulating video games.

⁵⁰ The act of crouching and standing in a quick manner repetitively over an opponent's dead body was to simulate sexual thrusts towards their opponent in order to express dominance. This action was often referred to as Tea-Bagging.

⁵¹ "ESRB Ratings Guide and Definitions."

On March 29th, 2006 the US Senate met to discuss the regulation of violent video games. Some legislators hoped that they could legally regulate games sold to minors.⁵² A few states had hoped to accomplish this but had failed. Many legislators argued that this law should go through not because it would regulate all games but because it would target only games with extreme violence or violence towards police officers during gameplay.⁵³ At the Senate hearing a Reverend spoke about the death of his brother who was a police officer. His brother and three others were gunned down by a teen that played games that depicted cop killing comparable to the Grand Theft Auto series. After shooting the three officers, the teen, Devin Moore, exclaimed “Life is like a video game. Everybody’s got to die sometime.”⁵⁴ The Reverend admitted that he did not know much about video games but felt that had Devin not been allowed to play games depicting cop killing at a young age, he may not have acted in such a reckless way. Many proponents of regulating video games, while they may not have had such extreme examples, shared this view. While the made a good point, not everyone was convinced that the selling and renting of video games needed to be regulated by the government.

Dmitri Williams, an assistant professor at the University of Illinois, pointed out flaws in research showing that violent video games made children and teens more violent. Williams explained that he could not agree that video games had a cause and effect relationship to violence because the testing and research was not fully accurate. He noted that playing video games in a lab is much different than playing at home or with peers, mainly because it lacked the social experience. Also, while there have been hundreds of tests, many of the tests only tested children

⁵² It is important to remember that while many retailers followed the ESRB rating system and did not sell M rated games to minors, they were not legally bound to this practice.

⁵³ United States. *What's in a Game?: Regulation of Violent Video Games and the First Amendment: Hearing Before the Subcommittee on the Constitution, Civil Rights and Property Rights of the Committee on the Judiciary, United States Senate, One Hundred Ninth Congress, Second Session, March 29, 2006*. Washington: U.S. G.P.O., 2006. 2.

⁵⁴ Ibid 3

for 10-30 minutes at a time.⁵⁵ Williams stated that many games play games for longer than 30 minutes within one session and played over the course of weeks, months, and years as opposed to a few research sessions. Overall Williams felt that it was challenging to call the research scientific or accurate since there were so many different games on the market. A different game with a different group of kids could have produced a majorly different result. The Senate agreed with Williams and stated that the argument for regulating video games could not bring about sufficient evidence in regards to video game violence and its effect on children.

Mainstream video games took another major leap in the 2000s, just as it had done in the 1990s. Games became more advanced and the industry brought a new aspect of gaming through online play. While advancements were made in technology arguments towards games stayed the same. The government, educators, and the general public were still concerned with children spending time inside to play games. People were also continuously concerned with what children were learning from videogames and whether or not games had become too violent for some kids to play. However, with the issues in the minds of the public mainstream games continued took hold of children's interests between mainstream and edutainment video games. The same things that made video games prosper in the 2000 decade seem to have been the downfalls of educational video games.

2000s: Educational Video Games

The outlook for the 2000s did not look too good for edutainment in the schools. With budget cuts and state testing to worry about, video games in the schools had to be pushed to the side. There were very little advancements in the games played on school computers. Many games were updated versions and remakes of games played in the 1990s. New video games in

⁵⁵ Ibid 10

the schools largely died out and most edutainment was then created for home systems. Since schools did not produce the opportunity to play educational games, many looked at the mainstream industry to take over. While in practice this is a useful idea, mainstream edutainment had to battle block buster titles that quickly grabbed the attention of children. Not unlike Nintendo's N64 takeover of the 1990s, many kids did not want to play edutainment games compared to popular games. Part of the reason was due to lack of adventure or excitement in edutainment and the lack of a big budget to produce a good game. While edutainment remained silent for the first half of the 2000 decade, there were some major successes in the second half.

Elementary and middle schools generally did not have a lot of funding to use towards games in the 2000s. Schools were more worried about updating their computers rather than their game libraries. Also, schools hoped to update programs that would help students with writing like Microsoft Word and internet capabilities rather than purchase edutainment. However, some schools were still able to provide edutainment games early on. Some popular edutainment titles in the early 2000s were Mighty Math Number Heroes and the Logical Journey of the Zoombinis.⁵⁶ Both games involved players going on adventures or solving puzzles and problems while learning math and other subjects. While these games were updated, they were similar to their 1996 originals. Rather than creating 3D environments like their mainstream counterparts, Might Math and the Zoombini series largely stayed the same with a few touchups. Since there was a low turnout for edutainment games produced for and presented in the schools, the process of creating edutainment for kids went to the mainstream producers.

While video games' largest goal was to provide entertainment, the idea that games could educate was not lost. An article titled "Video Games and the Future of Learning" held onto the hopes of edutainment and outlined areas where video games succeeded in teaching children.

⁵⁶ "Mighty Math Number Heroes." Mobey Games.

“Video games’ rich virtual worlds are what make video games such powerful contexts for learning.”⁵⁷ With the advancement in technology mainstream game companies could create edutainment that was visually stimulating as well as helpful in intellectual intake. One aspect of gaming that the authors pointed out was the use of massively multiplayer online (MMO) games. Like the name indicates, MMOs allow players to play over the internet with a large amount of players at the same time. This process is very similar to Xbox Live and other gaming services, but generally played on the computer and allow for many more individuals to be playing together at the same time.⁵⁸ MMOs had the potential for linking educational content like geography, language, and social studies with hundreds of kids at once.

One example pointed out by the authors was a political campaign to become Mayor of an online town in the game *The Sims*. *The Sims* allowed players to create fictional families with homes, jobs, friends, and activities. Two candidates of the campaign race were a 21 year-old and a 16 year-old. Throughout the race, the 16 year-old learned many important things about running for an office position. The 16 year-old had to learn about debates, muckraking, and complex political platforms like restructuring of the judicial system within the town.⁵⁹ This race for Mayor outlined the possibilities for learning that still existed through games. At the same time, *The Sims* was not actively creating these problems in the hopes that players would become more educated, instead the game provided situations in which the players wanted to learn in order to succeed.

⁵⁷ Shaffer, D, K Squire, R Halverson and J Gee. "Video Games and the Future of Learning." *The Pi Delta Kappan* 87 (2005). 104.

⁵⁸ With a few exceptions, most console games played online allow for 2-16 players to play at once. Computer games played online had the ability to allow more than 20 players to play at a given time. In the case of MMOs like *World of Warcraft*, thousands of players could be playing at the same time in an online world or realm.

⁵⁹ Shaffer, D, K Squire, R Halverson and J Gee. 105.

Online play and MMO games create a community that brings people together compared to classrooms that divide up students. Playing games online could bring students together and, like in the case of the Sims candidate race, cause students to do further learning in order to win. In some instances players of games went and created online forums and fan clubs to talk and learn about the games.⁶⁰ While online games provided outlets for edutainment, the authors reminded readers to take this information with a grain of salt. “Even if the best education games produced were ready to be bought and played... it’s not sure that most educators or schools would know what to do with them.”⁶¹ While back in the 1990s, games like MECC Museum Madness got special attention from educators, this was largely due to the fact that edutainment in the schools had reached a new and innovative level. Games by the 2000s were well understood in and out of the classroom. Many teachers or administrators did not play games as adults. While some teachers had played games and maybe even continued to play games, they were not taught how to teach with games. As long as the idea that video games were a waste of time, educators would not spend time on them in their already busy classrooms and curriculum.

The Canadian Broadcasting Corporation (CBC) echoed the idea that schools found games to be time wasters. The CBC pointed out that while educators showed faith in the value of gaming, game producers realized that edutainment was not a moneymaking industry compared to mainstream games. Since much of the shift in edutainment games went to mainstream games in the first half of the 2000s, video games producers would have to figure out a way to bring games directly to the schools.⁶² However, even if games were brought back to school, parents would still be the key to have knowledge come out of games. Like so many before, the CBC outlined issues related to parents not knowing about games students played. As argued before, parents

⁶⁰ IBID 106

⁶¹ IBID 107

⁶² CBC. “Video games can reshape education: U.S. scientists.” *CBC News*, October 19, 2006.

needed to become involved in their child's video game playing in order to fully understand what affects video games had on their kids. In this instance, knowing what games the child was playing would have allowed parents to see education values to edutainment. However, it would be hard for schools to push for edutainment in schools and incorporate it into lesson plans if parents did not believe in their worth. Had parents taken the time to observe their children's games, parents may have made a bigger push for schools to incorporate games. Parents would have been able to see that kids were gaining valuable educational information and not just high scores.

While games had their chance to be put back into schools and made by big time companies, this process never really happened. However, it did not stop outside sources and some gaming companies to produce edutainment for people.

Augmented reality games became a real possibility in the 2000s. In the 2008 a group called The Education Arcade worked on an augmented reality game that would mix the real world with supplemental information. Augmented reality games take place in the real world, but add virtual or simulated images to create a game.⁶³ The game allowed a player to use a GPS to find real locations; however the GPS screen would also provide information and clues regarding a fictional story. As the player reached each location, they would find factual information about the area while completing a task in the story.⁶⁴ Later inventions like the Apple Company's iPhone, a cellphone with many capabilities similar to a computer, allowed the user to download a program that taught users about stars. By point their iPhone to the sky, the Star Walk application would find where the user was standing in the world and show what stars or constellations were

⁶³ Augmented reality is like seeing a holographic image. While the holograph is visible and present, the viewer knows that the holograph is not a real object but a projected one.

⁶⁴ Jhass. "Augmented Reality Games." The Education Arcade.

about the users head.⁶⁵ These type of games brought players one step closer to real life while playing games.

Most of the 2000s lacked a popular and successful movement for edutainment. At the very end of the decade however, things started to change and edutainment in and out of the schools began to be produced and used for the next generation of students. In 2009 the game Gamestar Mechanic allowed players to create and their own games by achieving points through solving various problems and puzzles. The game was even included in a New York City curriculum that focused on game-based learning.⁶⁶ The game and the NYC curriculum helped show that edutainment in schools was making a comeback. Columnist Stefani Olsen made similar claims as people in the past that the gaming industry is slow to create edutainment because of the “chocolate-covered broccoli” system in place for creating games.⁶⁷ What Olsen meant was that many edutainment games at heart were not very creative, very simple, and were mainly schoolwork poorly hidden under the disguise of a video game. Olsen also referred to the one-popular Math Blaster and how it may have been a good game, Math Blaster and others lost out to pricing wars and the fact that the old games could not keep up with games found on the internet. Unlike edutainment on school computers before, Olsen states that Gamestar Mechanic was more of a unit of lessons that took multiple days to compete. This made it hard for teachers to put faith into the program given their already busy schedules.

Edutainment in schools during the 2000s was starting to meet a slow death. The popularity of games produced for home consoles by far were more complex, advanced, visually impressive, and gained the attention of kids. No one wanted to play a worksheet dressed up to look like a video game. Kids wanted to play something entertaining and possibly with their

⁶⁵ "App Store - Star Walk." iTunes.

⁶⁶ Olser, S. "Educational Video Games Mix Cool With Purpose." *The New York Times*, November 01, 2009.

⁶⁷ IBID

friends online. Even though the new millennium brought the hopes and capabilities of producing outstanding edutainment products the investment and interest was not present to do so.

Edutainment began to rest on the shoulders of the gaming industry's producers and even then there were not many interested.

Throughout the 2000s many educators did not trust video games as a learning medium. It was not until the end of the decade where a few companies came forward with new innovative ideas for the classroom. Like the mid-1980s, the Apple Company once again stepped up to help the classroom and edutainment. With products like the iPod and iPhone, Apple created downloadable edutainment applications that could be used in the classroom. While Apple's products were largely popular, they were also expensive and still not found in the majority of the classroom. However, the Apple Corporation opened a new window for edutainment in the classroom, one that would be praised by educators in the beginning of the next decade.

The gaming industry created a few games solely for the purpose of educating children. However these games were often made for children below the age of eight and did not capture the attention of older students. As video game makers were not producing many edutainment games for older children and the larger demographic of gamers they produced a pleasant windfall from their mainstream games. Some games played by kids produced an inherent educational quality that was not in the form of a math problem or a reading comprehension test. Many games created real problems that players used real skills or complex thinking to solve. Whether it was managing money for a football team or learning histories of cultures through the story of a game, players were learning. Playing games online offered an even deeper chance to learn through the meeting and interaction of different people and cultures. Some gamers in general went to the next level in talking about the games online through fan websites and publishing

opinions in online forums. The games were not education and teaching lessons to players, but they would not be seen as edutainment or allowed in schools. So in the overall view of the 2000s edutainment, especially games played in the schools, lost out to mainstream gaming and could not gain a foothold in the gaming industry until the last year of the decade.

Conclusion:

After starting as a relatively new form of entertainment in the 1980s, video games became to be loved by kids as a favorite pastime. While highly popular and successful, the history of video games is a rollercoaster of upwards progressing with twist and turns of negativity and questions. Mainstream video games had consistently grown more advances and with that advancement followed extreme popularity. The 1980s brought Arcades, home computers, and finally home consoles. The computers and consoles brought many children back home and away from Arcade parlors where they could be surrounded by both friends and strangers in an open and social atmosphere. The advancement of consoles and home playing brought around issues of kids becoming less active and the effect of violence on kids playing violent games. These issues would be ones that would stick with the video game industry until the present time.

The 1990s and 2000s brought equally stunning advancements in gaming technology. This technology consistently made games more realistic and thus the issue of realistic violence worried the public. Congressional hearings took place in both 1994 and 2006 in order to discuss violent games and was to prohibit children from play them or at least constructing and following a rating system. The ESRB took care of the rating system with flying colors, but the violence never went away. The mid-2000s brought another level to gaming with online play allowing

users to interact with each other from all over the world. The overall advancements in gaming produced high hopes as well as let downs for the possibility for games to become edutainment.

The 1980s created high hopes for a relationship between edutainment and video games. Many different games were produced for the home computers that were available to both the public and the schools. While very simplistic, the games offered students the chance to play a video game, something they loved to do at home, while being at school. However, the lack of any true video game substance never allowed students to become truly interested in edutainment games. While mainstream companies tried to produce some edutainment games, they often remade popular games to look like edutainment with very little educational value.

The 1990s continued the high hopes for schools and edutainment with the Macintosh computer and the plethora of successful games played in schools. The edutainment looked and played better than it had in the past; however the release of the N64 in 1996 marked a rift between edutainment and mainstream games that would never be repaired. After 1996 children flocked to mainstream gaming and rarely found interest in edutainment. Any interest left was due to the early success of edutainment in the 1990s, but as soon as mainstream evolved and edutainment did not the children spent their time playing console games. The 2000s marked a sort of death in edutainment with a revival starting in the mid-2000s but not fully present until the end of the decade. There was once hope of mainstream and edutainment to become one but the dream would never fully happen.

While edutainment and mainstream contain the same medium of play, they can be viewed within two separate histories that intersected at many points in time. Mainstream games grew and evolved overtime in a way that edutainment never did. Mainstream games have had a steadily growing popularity and interest while edutainment's past has been a turbulent one. Even

though mainstream games had created issues and questions with the general public, the demand made home consoles largely overshadow and attempt at making popular and effect edutainment games. With a new decade at hand it is hard to tell what will happen next. Mainstream games show no sign of slowing down while edutainment looks like it may make a comeback. However, looking at the history of video games one thing looks to be certain. With new advancements and the popularity of video games, there will always be hopes for edutainment with video games played in schools and a company willing to try and make it happen.

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