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## 4-H and Video Games

## Introduction



4-H is a global system for youth associations. As a professional and volunteer development space for the personal development of youth, 4-H allows for young people to interact within various programs. Since humble beginnings in 1927, 4-H has been managed by the National Institute of Food and Agriculture of the United States Department of Agriculture (USDA). With the slogan, 'head, heart, hands, and health', it is crucial to understand that this association asserts that self-care is vital to a good life.

A-H has been able to interact with a multitude of individuals. With a vast social media presence on sites and applications including, Facebook, Instagram, Pinterest, Google+, Youtube, LinkedIn and Flickr, one can conclude that 4-H is highly capable of



using technology to expand ideas. Therefore, 4-H should introduce video games as an important aspect of their curriculum for the school programs (youth clubs, after-school programs,

overnight and day camps) they provide. Research has presented a positive outlook video game has on education and health improvements.

## Video Games Benefits

Video games have indicated vast changes in school understudies in subjects, including arithmetic and memory. For 4-H, their programs want participates to "be true leaders"(4-H Site). Video games are interactive in which gamers use their skills to defeat a level or challenge. 4-H has asserted that their programs can make an individual gain "confidence, independence, resilience and compassion through stages and developed through experiences, not instruction"(4-H site). So why not allow young people take away skills through a gaming experience?

# MMORPG (Massively Multiplayer Online Role-Playing Games) have represented an increase in communication skills for gamers(Barr 283–294).

An improvement of students when communicating ideas. Matthew Barr's article "Student Attitudes to Games-Based Skills Development: Learning from Video Games in Higher Education," reports the users of MMORPG (Massively Multiplayer Online Role-Playing Games) have shown an improvement of students when communicating ideas. Gamers often need a verbal exchange to complete a level because of the group effort needs of the game. With the use of Bluetooth, the game becomes enjoyable as the user multitasks between verbal cues and using a controller. Students learn to multitask and well as fastly communicate in making decisions in the game. Video games have also represented an affiliation within attention capabilities and academic abilities (Tassell & Noval, 2015, p.24). Researched showed a positive memory reinforcement the more students played video games. Use of these action video game(AVGs), as Tassell and Novak found, made students attention span to be lengthened in addition to reducing anxiety with facing difficult concepts. The study also represented overall cognitive abilities have shown a positive change. The mental attributes when facing decisions have enhanced exceptionally.

Another study to determine if video games were a positive concept for education included the Nintendo Wii and physical education students (Vernadakis, 2012, p. 196-205). This research was created to determine if the Wii Fit Plus game used by the Nintendo Wii could benefit students balancing more than a traditional balancing training program. Thirty-two students were juniors at the Democritus University of Thrace. The students were divided into 2 groups. Sixteen students used the video game and the other sixteen students used the program. Students had been following an 8 week period. Research data recorded shown changed between each student before and after balance test. Each personal session was 24 minutes long, occurring twice a week. The video game Wii Fit is an interactive game in which students used a whiteboard for balancing. The other group using used mini trampolines and inflatable discs. Each student had improved when completing a single leg static balance using the Biodex stability system. The use of Nintendo Wii showed that as an education and physical game, it be used for balancing. Research showed a comparison to the normal balance program when comparing data due to Wii Fit game demands of its users.

#### Healthcare



Video games were also found useful for those who suffer from diabetes as well as oral hygiene. Video games are not initially a standard for issuing medical advice. However, research as also shown that video games are a positive method for learning.

Ahmad Aljafari found that approximately 90% of U.S.

children and teenagers agree that playing various video games on a myriad platform is a norm. With average video game use of almost an hour daily, video games have the potential for great influence. An interactive video game allowed children, in addition to their parents or guardians, to digest new knowledge on oral care. A vast faction of the game was to "children referred for extraction of decayed teeth under general anesthesia"(Aljafar). The new trial approach was met with vast problems including language barriers. But because some patients benefited from this game, it is critical to apply this concept to more languages offered. In a country where most of its children playing video games, more research needs to be devoted to keeping video games as a positive reinforcement of education.

Diabetics benefited from learning various forms of education in controlling symptoms and avoiding possible near-death experiences through video games. Those who are not diabetic benefit from learning more about the systemic disease as well as learn to care for others who may suffer. Research data included nine studies include 11 video games with diabetic care themes were utilized. The games focused on children suffering from Type 1 diabetes mellitus. The goal of this technology was to display vital methods of dieting, physical activity, using medication and even being responsible for monitoring their blood glucose levels. Results from the games showed a positive experience in which children found enjoyment become knowledgeable about the systemic disease.

There is also research that video games can also help stroke victims. Viva Press introduced research from Tel Aviv University with the work "Video Games Benefit Stroke Victims". This research presented that video games presented a positive movement capability reinforcement. Games helped patients more than traditional therapy. The demands of the game cause patients to move arms increasingly. The new therapy technique has patients enjoying their therapy. Patients were able to alter the game to fit their needs. As funded by the Marie Curie International Reintegration Grant at Sheba Medical Center, the introduction of video games have shown vast improvement for stroke

survivors.



### Conclusion

The usage of video games has proven to show a positive change within its users. Video games have been an influential

aspect since the first appearance of 1970s video game Pong (American Physical Society). Video

games value has shown growth overtime with billions of dollars in revenue. 4-H should include education video games to continually have the youth interested in learning as well as creating a positive environment.

4-H is a place for youth interaction. With the slogan, 'head, heart, hands, and health', it is crucial that the incorporation of education video games be included to maintain the goals they have created to obtain.

Video games should not substitute physical recreation for 4-H members. However, it is important to focus on the value video gaming has instead of the negative aspects. Games such as the Nintendo Wii have shown a positive impact on its users. For stroke victims, video games have allowed physical therapy body movement for therapy "He or she is now one of the players in the game and must use their own body to move around and play. The patient uses the same muscles that they would use in traditional exercises in the video game"(Atlanta Inquirer, May 28, 2005, p. 11). Yet, not all video games have a full body interaction.

Therefore, "The problem arises when children are not supervised" (Mccoy, Feb 5, 2008, Vol.124(23), p.8). Analyzing the best possible time frame and gaming habits should be instilled by parents and 4-H mentors because of video games interactions success: improvement of social skills, academic skills, and self-health care education.

Hence, video games should be apart of youth activities at 4-H included as an overseen time framed activity.



## Citations

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