

Western New England University

## Digital Commons @ Western New England University

---

OTD DEx Reports - College of Pharmacy and  
Health Sciences

College of Pharmacy and Health Sciences

---

2021

### Gaming with Feeling: A Video Game Based Out-of-School Time (OST) Program to Promote Social-Emotional Learning (SEL) in Elementary School Children

Amy R. Calverley  
*Western New England University*

Follow this and additional works at: <https://digitalcommons.law.wne.edu/otd>

---

#### Recommended Citation

Calverley, Amy R., "Gaming with Feeling: A Video Game Based Out-of-School Time (OST) Program to Promote Social-Emotional Learning (SEL) in Elementary School Children" (2021). *OTD DEx Reports - College of Pharmacy and Health Sciences*. 12.  
<https://digitalcommons.law.wne.edu/otd/12>

This Report is brought to you for free and open access by the College of Pharmacy and Health Sciences at Digital Commons @ Western New England University. It has been accepted for inclusion in OTD DEx Reports - College of Pharmacy and Health Sciences by an authorized administrator of Digital Commons @ Western New England University.

**Gaming with Feeling: A Video Game Based Out-of-School Time (OST) Program to  
Promote Social-Emotional Learning (SEL) in Elementary School Children**

A Doctoral Experiential Capstone Project

Presented to the Faculty of Western New England University

In Partial Fulfillment of the Requirements for  
the Entry-Level Doctorate in Occupational Therapy

by

© Amy R. Calverley 2021

July 2021

**Gaming with Feeling: A Video Game Based Out-of-School Time (OST) Program to  
Promote Social-Emotional Learning (SEL) in Elementary School Children**


A Doctoral Experiential Capstone Project

By

Amy R. Calverley

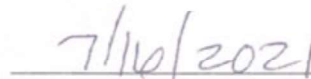
July 2021

APPROVED BY:



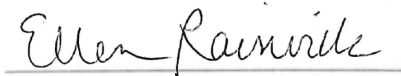
Amy Y. Burton OT, OTD, OTR/L

Faculty Mentor



Date

APPROVED BY:



Ellen Berger Rainville OT, OTD, MS, FAOTA

Doctoral Experiential Coordinator

7/30/2021

Date

### **Abstract**

The scholarly focus of this doctoral experiential (DEx) project was to create a program curriculum, based on the social-emotional learning (SEL) needs of Glickman elementary students and their current SEL curriculum, which utilizes video games to teach and promote SEL skills. This was done with 3rd-grade students at Glickman Elementary School in Springfield Massachusetts, working with one classroom specifically. The purpose of this DEx project was to expand on the SEL curriculum, providing a new, fun, and motivating way to engage students during an out-of-school time program. This was done by creating the curriculum for a program with guidance on how video games can be used to promote SEL skills. For the community experiential of the DEx, regular needs assessments were performed to determine where the needs and gaps are in their SEL curriculum, to identify the student's SEL needs, and to provide suggestions and education to teachers, faculty, and staff as needed through spending time within the school community through Zoom in a 3rd-grade classroom. Due to the impact the COVID-19 pandemic has had on the social-emotional well-being of the students and changing the way the classroom looks, it was considered that these students would benefit from more carry-over of the SEL skills through supplemental SEL-based lessons and activities, incorporation of the skills into regular academic lessons, and through extended learning opportunities.

*Keywords:* Social-emotional learning, video games, out-of-school time

### **Introduction**

Social emotional learning (SEL) is important to incorporate in a school's curriculum as it promotes improved behavior, enhances academic performance and outcomes, promotes healthy emotional well-being and social skills, and betters lifetime outcomes (SEL Impact, 2019). The Springfield Public Schools (SPS) system had utilized the SEL curriculum called Second Step before, but some schools reported that it was not appropriate for their students so they sought alternative programming. Currently, due to the high need of SEL within schools following the COVID-19 pandemic, forcing learning to be virtual for over a year, SPS is back to utilizing Second Step. Glickman Elementary School is currently implementing it as suggested with the once weekly, approximately 20-30 minute lessons, but teachers are finding that carry-over of the skills into the everyday academic lessons is a challenge.

Many of the students come from trauma backgrounds, struggle with self-management and responsible decision making, have difficulty with asking for help, and are at risk for social isolation or struggles due to the impact of the COVID-19 pandemic and it changing the way the classroom looks. Students would benefit from more carry-over of the SEL skills through supplemental SEL-based lessons and activities, incorporation of the skills into regular academic lessons, and through extended learning opportunities. In the SPS district strategic plan for 2017-2020, priority #4 is to "expand access to social, emotional and academic safety nets for all students and families". One way they plan to accomplish this is by providing more extended learning opportunities (SPS, n.d.). Video games may offer a way to incorporate SEL back into the schools, through extended learning opportunities, in a way that is fun and motivating for the students.

Video games have a history of negative connotations, particularly in that some video games are thought to cause violent behavior, aggression, lower prosocial behavior, diminished empathy, and desensitization to violence (Prot, Anderson, Gentile, Brown, & Swing, 2014). However, there is also research that highlights the benefits and the therapeutic use of video games. For example, Griffiths (2003) found that video games can be beneficial in developing social and communication skills among the learning disabled, improving impulse control and attention span, and can serve as a healthy outlet for frustration and anger (Griffiths, 2003). Prosocial video games, games that typically contain prosocial or helping behavior content, were found to be able to improve prosocial behaviors, decrease aggression, and increase empathy and helping behaviors (Prot, et. al., 2014). In an article written by Granic, Lobel, and Engels (2014), they focus on the benefits of moderate gaming in four domains: cognitive, emotional, social, and motivational, highlighting that games can improve spatial skills, problem-solving skills, and emotional regulation, and promote relaxation and reduce stress (Granic, Lobel, & Engels, 2014). Gaming can also help improve emotional self-regulation, in the way that regular gamers were found to better regulate their emotions, feeling emotions more strongly but being less reactive to them (Villani, Carissoli, Triberti, Marchetti, Gilli, & Riva, 2018). It is noted in the literature that some of the biggest motivators of children and adolescents to play video games are to relieve stress and boredom, for the social aspect of gaming, and playing with catharsis motivation (Ferguson & Olson, 2013). The use of video games as a therapeutic tool is not something that should be overlooked, instead, it should be considered as a fun and motivating way to engage individuals and promote SEL skills.

### **Doctoral Experiential Project Overview**

The scholarly focus of this DEx was to create a program curriculum, based on the social-emotional learning (SEL) needs of the population and their current SEL curriculum, which utilizes video games to teach and promote SEL skills. The focus of the community experiential of the DEx, was to determine the SEL needs of the students and the school, learn about this population's video game habits, and provide supports to the current SEL curriculum. This was done while working with 3rd-grade students at Glickman Elementary School in Springfield Massachusetts, with one classroom specifically, and having informal discussions with the teacher, staff, and the students.

The community experiential purpose of this DEx project was to determine where the needs and gaps are in their SEL curriculum, to identify the student's SEL needs, and to provide suggestions and education to teachers, faculty, and staff as needed. This was accomplished by performing regular needs assessments through observations in a 3<sup>rd</sup>-grade classroom via Zoom, interacting with the students, having regular check-ins and discussions with the teacher, informal interviews with other Glickman staff, giving a presentation during a staff meeting, and creating informational resources (see Appendix A) related to the focus of this DEx project. Individual discussions with students via Zoom breakout rooms were also held to learn more about this population's gaming habits and behaviors for informing the product of the scholarly project (see Appendix B).

The scholarly purpose of this DEx project was to expand on and supplement the SEL curriculum, providing a new, fun, and motivating way to engage students during an out-of-school time program. This was accomplished by creating the curriculum for a program with guidance on how video games can be used to promote SEL skills. This curriculum was designed to align with and supplement the school's current SEL curriculum, Second Step, and address the identified

SEL needs of the students (see Appendix C). The curriculum's design is comprised of 10 sessions that are to be run twice a week for 5 weeks or once a week for 10 weeks, and can be run as an after-school program or summer program. The program focuses on 5 main themes with 2 sessions dedicated to each theme. The themes are 1) Independent learning and goal setting, 2) Understanding emotions and empathy, 3) Handling frustration and overwhelming feelings, 4) Critical thinking, problem-solving, and communication, and 5) Communication and teamwork. The curriculum was reviewed by three individuals who gave feedback which was used to create the final draft. A trial session of the program was also run with a convenience sample of two children, not from the original population.

For more information regarding this DEx project, please refer to this student's e-portfolio (See Appendix D).

## **Discussion and Recommendations**

### **Discussion**

The overall focus of this DEx project was to understand the SEL needs of students at Glickman Elementary school and how video games could be utilized to teach and promote SEL skills. In performing the needs assessment during the first few weeks of the DEx, through observations and discussions, it was found that many of the students come from trauma backgrounds, struggle with self-management and responsible decision making, have difficulty with asking for help, and are at risk for social isolation or struggles due to the impact of the COVID-19 pandemic. It was also noted that teachers were finding it challenging to carry-over the SEL skills taught during the Second Step lessons, into the normal school day. In particular, the teacher of the 3<sup>rd</sup>-grade class expressed that the biggest needs for her class were promoting



the students to be more independent learners, make responsible decisions, self-regulation and attention, and fostering a stronger sense of community in the hybrid setting. Along with providing general supports, it was observed that video games played a big role in this class's SEL needs.

All the students in this specific class play video games, and one way that these students stayed connected was through video games. Often times during free moments at the beginning or end of the day, students would share about the games they were playing or set up plans to play together during lunch or after school. There were also the "Fun Friday" were at the end of the day on Fridays, the whole class would play a game together and really get to connect and have fun. These observations support the research in that video games can have positive impacts on social well-being and improving social skills. The majority of the students also reported that the main reasons they play are because video games are fun and they can play with other people. This also supports Ferguson & Olson's (2013), research on motivations for playing video games.

Another thing that was noted in the research was how video games can provide these benefits when played in moderation and that excessive gaming is what more often leads to the negative outcomes associated with gaming. During time spent in the classroom, interacting with the students, and discussing with them about their gaming habits, there was a correlation noted between how much video games a student plays and classroom behaviors. This was not a perfect correlation, however, and suggests that there are a multitude of factors that can influence a child's social-emotional well-being and video games is only one factor. Knowing this, it is suggested that an out-of-school time program may be effective in promoting SEL skills and providing a safe environment for students to practice those skills, while promoting healthy gaming habits.

The first limitation was the small sample size and focusing mainly on one class instead of the school as a whole. Another limitation was not being able to directly observe a lot of the student's gaming habits outside of "Fun Friday", and other behaviors and games played at home were self-reported. The creation of the program was also limited to using mostly free games that could be accessed on a computer and were within the age rating range for the population. Lastly, the developed program curriculum was not able to be trialed with the intended population and so it is uncertain if such a program will provide the proposed benefits as intended.

### **Recommendations**

The use of video games as a therapeutic tool is not something that should be overlooked, instead it should be considered as a way to engage individuals and promote SEL skills. Gaming in moderation can provide a variety of benefits, including promoting SEL skills and providing a safe environment to practice developing these skills (Granic, et. al., 2014). Video games are gaining more and more popularity and are being utilized more in the classrooms. They can provide the perfect opportunity to build SEL skills, in and out of the school environment when healthy gaming habits are promoted in children. The program curriculum created for this DEx project is one example of how video games can be used for promoting SEL skills in an out-of-school time program. Future research on and trialing the created program to assess the proposed outcomes is recommended to know and understand the curriculum's true effectiveness. Expansion of the program curriculum with access to a wider variety of available games to explore how a multitude of games can be used to promote SEL skills is also recommended.

### **Learning Outcomes**

Learning throughout the DEx process was constant. I felt that at the end of the DEx, I had learned a great deal about the population and setting I was working with, my project topic, and about myself. One of the first things I learned was how to conduct a needs assessment through research, observations, and discussions. The needs assessment made it possible for me to identify and understand the needs of the population to better support them using my DEx project's focus. Through the research, observations, and discussion I was also able to improve and develop research skills such as data collection and analysis for assessing the needs of the population and developing my program's curriculum. The extensive research with regular literature review and web searches, as well as attending several webinars was furthermore a key factor in helping me develop my clinical reasoning skills and use of evidence-based practice research to support the use of different interventions. This includes any and all informational resources created and the development of the out-of-school time program curriculum.


Learning to develop a new program curriculum to meet the needs of a population was, I feel, the most fun learning process. Through research and discussions, I learned how to develop a curriculum, then through my needs assessment I was able to develop the program to align with the populations' needs, mission, and goals. With the focus of my program being on the use of video games to promote SEL, an extensive amount of research and learning was dedicate to figuring out how these two seemingly unconnected things could be brought together. Along with creating the informational handouts on video games and SEL, creating such a program is where I was really able to bring together everything I had learned. It was this learning that truly helped me in understanding the importance or SEL, how SEL can be promoted within schools, the role SEL and video games played in this population, and the connection between SEL and video games.

### References

- Ferguson, C. J., & Olson, C. K. (2013). Friends, fun, frustration and fantasy: Child motivations for video game play. *Motivation and Emotion*, 37(1), 154-164. doi: 10.1007/s11031-012-9284-7
- Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *American psychologist*, 69(1), 66-78. <http://dx.doi.org/10.1037/a0034857>
- Griffiths, M. (2003). The therapeutic use of videogames in childhood and adolescence. *Clinical child psychology and psychiatry*, 8(4), 547-554. doi:10.1177/13591045030084012
- Prot, S., Anderson, C. A., Gentile, D. A., Brown, S. C., & Swing, E. L. (2014). The positive and negative effects of video game play. In Jordan, A.B., & Romer, D. (Eds.), *Media and the well-being of children and adolescents* (109-128). New York, NY: Oxford University Press.
- SEL Impact. (2019). Retrieved from <https://casel.org/impact/>
- Springfield Public Schools. (n.d.) *2017-2020 district strategic plan* [PDF document]. Retrieved from [https://www.springfieldpublicschools.com/UserFiles/Servers/Server\\_494605/File/About/strategic\\_plan\\_2.0\\_rev\\_10\\_002\\_0.pdf](https://www.springfieldpublicschools.com/UserFiles/Servers/Server_494605/File/About/strategic_plan_2.0_rev_10_002_0.pdf)
- Villani, D., Carissoli, C., Triberti, S., Marchetti, A., Gilli, G., & Riva, G. (2018). Videogames for emotion regulation: a systematic review. *Games for health journal*, 7(2), 85-99. doi: 10.1089/g4h.2017.0108

## Appendix A

### Informational Resources



Amy R. Calverley, OTS

### What is a Video Game?

A video game is any type of game that is played on a digital or electronic platform or device. This includes games that are played for entertainment or learning and are played on a gaming console, computer, tablet, smartphone, or other devices. Video games can range from being a simple puzzle app to a much more complex game with many actions.

### Moderate vs. Excessive Gaming<sup>6</sup>

Moderate Gaming is often defined as playing for about an hour most days or about 6 hours per week. For children, this can be considered playing at least 1-2 hours per week but less than 9 hours.

Excessive gaming, especially in young children, is considered playing for 9 hours or more per week.

Moderate gaming can provide a variety of benefits whereas excessive gaming could result in more negative outcomes.

### Statistics on Gaming in children & adolescents

- 28% of gamers are younger than 18<sup>9</sup>
- 97% play for at least one hour per day<sup>5</sup>
- The average time spent gaming per day is 2.7 hours<sup>1</sup>
- 30.1% spend 2+ hours per day gaming<sup>1</sup>
- 14% started playing as early as 1 year old<sup>1</sup>
- 91.5% play games with others at least occasionally<sup>4</sup>
- 76.3% of gaming children had another gamer at home<sup>1</sup>
- 31% had a favorite game rated T and 30% had a favorite game rated M<sup>2</sup>
- On average, males spend more time gaming than females and are more likely to select a violent video game<sup>1 & 4</sup>
- 2020 saw a significant rise in video game sales and video game hours played<sup>7 & 8</sup>

### Types of Video Games

• Action/Shooter	• Simulation (life/vehicle)
• Action/Adventure	• Rhythm/Music
• Role-Playing Games	• Sports
• Open World (Sandbox)	• Strategy/Puzzle
• MMORPGs	• Learning
• Fighting	• And many more!

### Video Game Rating System<sup>3</sup>

In the U.S., the Entertainment Software Rating Board (ESRB) assigns ratings based on certain game content. These are referred to as the ESRB ratings.

Game ratings:

E - suited for all ages and may contain minimal mild violence or language

E10+ - suited for ages 10 and up and may contain more mild violence or language

T - suited for ages 13 and up and may contain violence, crude humor, minimal blood, or some strong language

M - suited for ages 17 and up and may contain intense violence, blood and gore, sexual content, or strong language


### References

1. Aydin, B., Oflu, A., & Yalcin, S. S. (2021). Evaluation of video game playing status in school-age children with various variables. *Turkish Archives of Pediatrics*, 56(2), 136-140. doi: 10.5152/TurkArchPediatr.2020.20092
2. Chang, J. H., & Bushman, B. J. (2019). Effect of exposure to gun violence in video games on children's dangerous behavior with real guns: a randomized clinical trial. *JAMA network open*, 2(5), e194319-e194319. doi:10.1001/jamanetworkopen.2019.4319
3. Entertainment Software Rating Board. (2021). Ratings Guide. ESRB. <https://www.esrb.org/ratings-guide/>
4. Ferguson, C. J., & Dixon, C. K. (2013). Friends, fun, frustration and fantasy: Child motivations for video game play. *Motivation and Emotion*, 37(1), 154-164. doi: 10.1007/s10331-012-9284-7
5. Grant, L., Lobel, A., & Engels, E. C. (2014). The benefits of playing video games. *American psychologist*, 69(1), 66-78. <http://dx.doi.org/10.1037/a0034857>
6. Pujol, J., Fenoll, R., Form, J., Harrison, B. J., Martinez-Vilavella, G., Macià, D., ... & Sunyer, J. (2016). Video gaming in school children: How much is enough?. *Annals of neurology*, 80(3), 424-433. doi: 10.1002/ana.24745
7. Salz, P.A. (2020, Dec. 28). How the gaming industry steps up to help us cope and slow the spread of coronavirus. *Forbes*. <https://www.forbes.com/sites/peggyannsalz/2021/12/28/how-the-gaming-industry-steps-up-to-help-us-cope-and-slow-the-spread-of-coronavirus/?shw6c3930865c43>
8. Smith, N. (2020, May 12). The giants of the video game industry have thrived in the pandemic. Can the success continue?. *The Washington Post*. <https://www.washingtonpost.com/video-games/2020/05/12/video-game-industry-coronavirus/>
9. Yanev, V. (2021, April 2). Video game demographics - who plays games in 2021. *Techjury*. <https://techjury.net/stats-about/video-game-demographics/>

Figure A1


# Benefits of Moderate Gaming

Amy R. Calverley, OTS



## Emotional Benefits


1. Generates positive feelings, improve mood, promote relaxation, and reduce stress or anxiety<sup>5</sup>
2. Promotes adaptive emotional regulation strategies like acceptance, problem-solving, and reappraisal,<sup>5</sup> decreases emotional reactivity<sup>10</sup> and aggressive thoughts or behaviors,<sup>5</sup> and provides a “healthy” outlet for anger<sup>6</sup>
3. Improves mental health outcomes<sup>4</sup>



## Social Benefits


Over 70% of gamers play socially on a regular basis<sup>5</sup>

1. Improves prosocial and civic behaviors including empathy, helping behaviors, cooperation, support, and sharing<sup>8</sup>
2. Relationship appraisal and learning whom to trust, whom to reject, and leading a group<sup>5</sup>
3. Improves social skills and communication<sup>6</sup>




## Cognitive Benefits

1. Spatial skills, higher spatial resolution in visual processing, and enhanced mental rotation<sup>5 & 7</sup>
2. Attention allocation and filtering out irrelevant information more efficiently and effectively<sup>5</sup>
3. Problem-solving skills and enhanced creativity<sup>5</sup>




## Motivational Benefits

1. Promotion of an incremental theory of intelligence; a belief that intelligence is malleable and can be cultivated rather than fixed<sup>5</sup>
2. Persisting in the face of failure<sup>5</sup>



## Other Benefits

Hand-eye coordination,<sup>2</sup> physiotherapy,<sup>2</sup> pain management,<sup>6 & 7</sup> improved self-esteem,<sup>2</sup> understanding consequences,<sup>6</sup> learning,<sup>6</sup> and exercise<sup>6</sup>



## Negative Outcomes of Excessive Gaming

1. Behavior or conduct problems<sup>9</sup>
2. Attention problems<sup>2</sup>
3. Increased emotional reactivity<sup>10</sup>
4. Aggressive thought, behaviors, or actions<sup>2 & 3</sup>
5. Lower grades/academic performance<sup>1</sup>
6. Poor/decreased sleep<sup>1</sup>
7. Poor social skills<sup>1</sup>
8. Overweight or obesity<sup>1</sup>

### References

1. American Academy of Child & Adolescent Psychiatry. (2015, June). Video games and children: Playing with violence. [https://www.aacap.org/families\\_and\\_youth/facts\\_for\\_families/FFF\\_Guide/Children-and-Video-Games-Playing-with-Violence-092.aspx](https://www.aacap.org/families_and_youth/facts_for_families/FFF_Guide/Children-and-Video-Games-Playing-with-Violence-092.aspx)
2. Blower, P., Groves, C. L., & Docherty, M. (2012). Video games do indeed influence children and adolescents' aggression, prosocial behavior, and academic performance: A clearer reading of Ferguson (2015). *Perspectives on Psychological Science*, 10(5), 675-673.
3. Chang, J. H., & Bauman, B. J. (2019). Effect of exposure to gun violence in video games on children's dangerous behavior with real guns: a randomized clinical trial. *JAMA network open*, 2(5), e190219-e190219. doi:10.1001/jamanetworkopen.2019.0319
4. Ferguson, C. J., & Olson, C. K. (2013). Friends, fun, frustration and fantasy: Child motivations for video game play. *Motivation and Emotion*, 37(1), 154-164. doi: 10.1007/s11031-012-9284-7
5. Grant, L., Lobel, A., & Fergus, R. C. (2014). The benefits of playing video games. *American psychologist*, 69(1), 66-78. <http://dx.doi.org/10.1037/xap0000482>
6. Griffiths, M. (2003). The therapeutic use of videogames in childhood and adolescence. *Clinical child psychology and psychiatry*, 14(4), 547-554. doi:10.1177/1359104503008401
7. McDowell, R., & Volk, E. H. (2018). Conceptualizing “games for good” as cognitive technologies. *Cognitive Technology*, 14(2), 120-131.
8. Pitt, S., Anderson, C. A., Gentile, D. A., Brown, S. C., & Swing, E. L. (2014). The positive and negative effects of video game play. In Jordan, A.B., & Ramer, D. (Eds.), *Media and the well-being of children and adolescents* (109-128). New York, NY: Oxford University Press.
9. Pujol, J., Fenuil, R., Fenuil, J., Hanton, B. J., Martinez-Villaverde, C., Macià, D., ... & Sanyal, J. (2015). Video gaming in school children: How much is enough? *Annals of neurology*, 78(3), 434-433. doi: 10.1002/ana.24745
10. Villavi, D., Carisoli, C., Tiberti, S., Marchetti, A., Gili, G., & Riva, G. (2018). Videogames for emotion regulation: a systematic review. *Games for health journal*, 7(2), 85-99. doi: 10.1080/gah.2017.0108

Figure A2



# Promoting Healthy Gaming Habits in Children

Amy R. Calverley, OTS

## Check ESRB ratings

ESRB ratings provide insight into a game's amount/type of violence and other content.<sup>2</sup>

These ratings can be used to help select games you would be comfortable letting your child play based on age and developmental appropriateness.<sup>1</sup>

## Monitoring online game use

13% of 8 to 11 year-olds talk to strangers in online games<sup>6</sup>

Monitor their online game use and have a discussion with them about the potential dangers of talking to strangers online<sup>3</sup>

- Assure them they can come to you if anything questionable happens

## Know the games they play

Knowing about the games your child is playing can help you make better informed decisions about what they play and how long they play for

- Take an interest in games if you don't already<sup>4</sup>
- Be present while they are playing or play with them to share the experience<sup>4,5,1</sup>
- Understand how the game can create a "new world" that pulls the child in and what the perceived benefits and dangers may be<sup>4</sup>
- Have in-depth conversations with your child about the games they are playing<sup>4</sup>
  - This can also help them let go of frustrations or other feelings they had while playing<sup>4</sup>
- Understand what about the game your child likes and why they play<sup>4</sup>
- Remember that you can be a role model<sup>4</sup>

## Setting limits

- Limit total screen time and time spent playing video games<sup>1,8,3</sup>
- Set parental controls for internet access and in-game purchases<sup>3</sup>
- Set clear rules for game content and playing time for in and out of the home<sup>1</sup>
- Allow video games in a public room of the home, not in the child's bedroom<sup>1</sup>
- Only allow them to play after homework and/or chores are completed<sup>1</sup>

## How much is too much?

30.1% of gamer children spend 2+ hours per day playing video games<sup>2</sup>

Excessive gaming is considered playing 9+ hours per week and could result in negative outcomes<sup>7</sup>

## Understanding why they play video games<sup>4</sup>

- Four main motivating factors:
  - Fun/challenging
  - Social relatedness/playing with others
  - Catharsis (relieving strong emotion)
  - Boredom
- Many like to play games because they give them a sense of accomplishment/success when good at them
- Playing violent video games was positively associated with fun or catharsis motivations

## References

- American Academy of Child & Adolescent Psychiatry. (2015, June). Video games and children: Playing with violence. [https://www.aacap.org/families\\_and\\_youth/facts\\_for\\_families/FFF-Guide/Children-and-Video-Games-Playing-with-Violence-091.asp](https://www.aacap.org/families_and_youth/facts_for_families/FFF-Guide/Children-and-Video-Games-Playing-with-Violence-091.asp)
- Aydin, B., Oflu, A., & Yilmaz, S. S. (2021). Evaluation of video game playing status in school-age children with various variables. *Turkish Archives of Pediatrics*, 56(2), 136-140. doi: 10.5152/TurkArchPediatr.2020.20092
- ExtendedDoots. (2017, Sept. 13). How to use video games to help students learn. <https://www.extendeddoots.com/after-school-articles/how-to-use-video-games-to-help-students-learn>
- Ferguson, C. J., & Olson, C. K. (2013). Friends, fun, frustration and fantasy: Child motivations for video game play. *Media and Environment*, 27(1), 154-164. doi: 10.1007/s11083-012-9184-7
- Kulman, R. (2019, Jan. 30). What to do if your child gets moody and frustrated after playing video games. *Learning Works for Kids*. <https://learningworksforkids.com/2019/01/what-to-do-if-your-child-gets-moody-and-frustrated-after-playing-video-games/>
- Livingstone, S. (2018, Sept. 5). The importance of video game literacy for healthy parenting. *The London School of Economics and Political Science*. <https://blogs.lse.ac.uk/parentinganddigitalfuture/2018/09/05/the-importance-of-video-game-literacy/>
- Papoi, J., Fennell, R., Fennell, J., Harrison, B. J., Martinez-Vilaveila, G., Mack, D., ... & Surry, J. (2016). Video gaming in school children: How much is enough?. *Annals of neurology*, 80(3), 424-433. doi: 10.1002/ana.24745

Figure A3

# How Video Games can be Used to Promote SEL Skills

Amy R. Calverley, OTS

<h2 style="margin: 0;">Benefits of Gaming</h2> <p>Video gaming in moderation can have the potential to provide learning benefits for children in a similar way that other forms of play, media, or TV shows can. Video gaming is a form of play in which children can experiment with social experiences, experience a range of emotions, learn to manage those emotions, develop important cognitive skills, learn to problem-solve, understand consequences, and persevere in the face of failure.<sup>4</sup></p>	<h2 style="margin: 0;">What is SEL?</h2> <p>Social-emotional learning, or SEL, is about acquiring and applying skills, knowledge, and attitudes to develop healthy identities, understand and manage emotions, show empathy, achieve goals, maintain supportive and healthy relationships, and make safe and responsible decisions.<sup>2</sup></p>	
<h2 style="margin: 0;">Social Skills</h2> <p>Social gaming can positively influence well-being and games with cooperation and teamwork can encourage and reward positive social interactions to achieve a common goal<sup>1</sup></p> <p>In-game social stories and storylines can improve social skills by allowing children to play out different scenarios and see which actions they take result in the desired outcome<sup>5</sup></p>	<h2 style="margin: 0;">Self-Regulation</h2> <p>Video games can expose children to a range of emotional stimuli they may not always experience in the day-to-day and they can learn adaptive strategies, while playing, to manage those emotions<sup>8</sup></p> <p>Games can also provide a healthy outlet for strong emotions<sup>5</sup></p> <ul style="list-style-type: none"> <li>• There is caution with using this excessively, however, as there is a point in which it could become maladaptive and used as a tool for avoidance<sup>1</sup></li> </ul>	<h2 style="margin: 0;">Problem-Solving &amp; Learning</h2> <p>In-game puzzles often come with little instruction, leaving players to explore various possibilities and solutions which can promote using trial and error strategies<sup>4</sup></p> <p>Other games that include learning or academic content can get children excited about and engaged with learning</p> <ul style="list-style-type: none"> <li>• Minecraft can even be used to teach about and build historical buildings<sup>6</sup></li> </ul>
<h2 style="margin: 0;">Understanding Emotions and Prosocial Behaviors</h2> <p>Prosocial games (games that have aspects of helping or caring for other people or animals) can help decrease aggression, and increase cooperation, sharing, caring for others, empathy, and helping behaviors<sup>7</sup></p> <p>Controlling in-game avatars can help promote perspective taking as the player puts themselves in their avatar's shoes and helping other in-game characters or other players in a cooperative game can promote empathy<sup>3</sup></p>		<h2 style="margin: 0;">References</h2> <ol style="list-style-type: none"> <li>1. Association for Psychological Science. (2019, Nov. 6). Games can be good – when you play for the right reasons. <a href="https://www.psychologicalscience.org/publications/chronicle/online/games-can-be-good-when-you-play-for-the-right-reasons.html">https://www.psychologicalscience.org/publications/chronicle/online/games-can-be-good-when-you-play-for-the-right-reasons.html</a></li> <li>2. CASEL. (2021). What is SEL? <a href="https://casel.org/what-is-sel/">https://casel.org/what-is-sel/</a></li> <li>3. Farber, M. (2018, April 13). Teaching empathy with video games. Edutopia. <a href="https://www.edutopia.org/article/teaching-empathy-video-games">https://www.edutopia.org/article/teaching-empathy-video-games</a></li> <li>4. Grant, L., Label, A., &amp; Engels, R. C. (2014). The benefits of playing video games. <i>American psychologist</i>, 69(1), 66-78. <a href="http://dx.doi.org/10.1037/a0034857">http://dx.doi.org/10.1037/a0034857</a></li> <li>5. Griffiths, M. (2003). The therapeutic use of videogames in childhood and adolescence. <i>Clinical child psychology and psychiatry</i>, 8(4), 547-554. <a href="https://doi.org/10.1177/13591045030084012">doi:10.1177/13591045030084012</a></li> <li>6. McMahon, W. (2019, Feb. 11). This district rolled out Minecraft and teacher collaboration skyrocketed. EdSurge. <a href="https://www.edsurge.com/news/2019-02-11-this-district-rolled-out-minecraft-and-teacher-collaboration-skyrocketed">https://www.edsurge.com/news/2019-02-11-this-district-rolled-out-minecraft-and-teacher-collaboration-skyrocketed</a></li> <li>7. Prot, S., Anderson, C. A., Gentile, D. A., Brown, S. C., &amp; Swing, E. L. (2014). The positive and negative effects of video game play. In Jordan, A.B., &amp; Romero, D. (Eds.), <i>Media and the well-being of children and adolescents</i> (109-128). New York, NY: Oxford University Press.</li> <li>8. Villani, D., Carlisoli, C., Triberti, S., Marchetti, A., Gill, G., &amp; Riva, G. (2018). Videogames for emotion regulation: a systematic review. <i>Games for health journal</i>, 7(2), 85-99. <a href="https://doi.org/10.1089/g4h.2017.0108">doi: 10.1089/g4h.2017.0108</a></li> </ol>

Figure A4



**Appendix B**

## Student Discussion Questions

1. Do you play video games?
2. What system(s) do you typically use?
3. What games/kinds of games do you like to play?
4. How often do you play and for how long?
5. What do you like about video games? Why do you play?
6. Are you expected to finish your homework before you can play?
7. How do you act while playing?
8. Would you be interested in an SEL-VG after school/OST program?

## Appendix C

### Program Profile and Instructional Framework

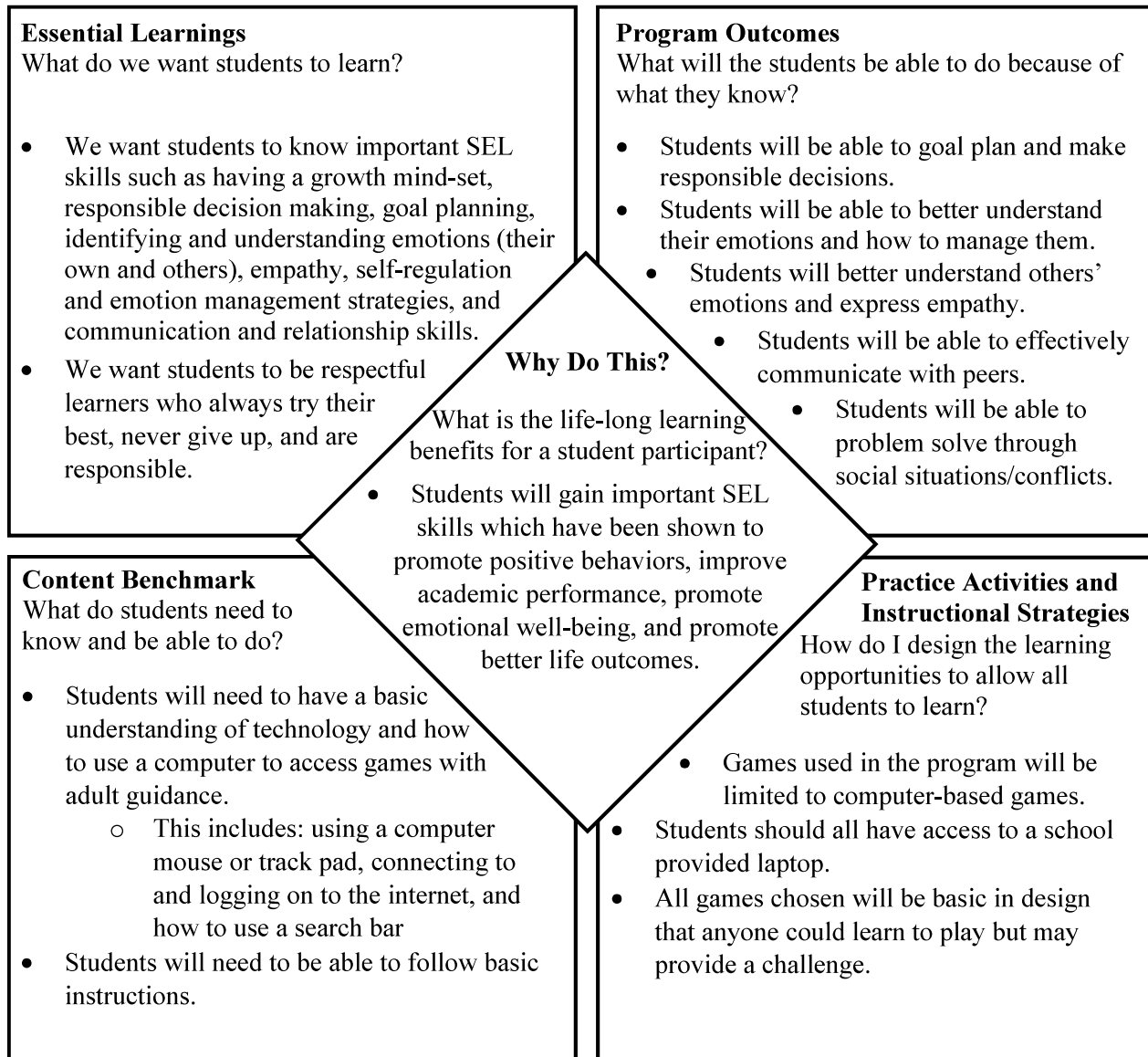
#### Program Profile

<b>Outcome/Goal</b>	Learn how video games can be used to teach, promote, and practice SEL skills. Participants will improve their SEL skills through playing video games, activities, and discussions.
<b>Aligned with Standards</b>	This program is designed to supplement the SEL curriculum currently utilized at Glickman Elementary School. It is designed to address identified SEL needs of this specific population.
<b># of Sessions</b>	10
<b># of participants</b>	~16 (At least 10, no more than 20) <ul style="list-style-type: none"> <li>Ages 8-10 years old (mainly 3<sup>rd</sup> to 5<sup>th</sup> graders)</li> </ul>
<b>End Product(s)</b>	<ul style="list-style-type: none"> <li>Students will strengthen their SEL skills through playing video games, activities, and discussion as a group and with peers</li> <li>Students will be able to apply what they learn in this program to real life situations and when playing video games at home</li> </ul>

\*Program Profile table used from National Center for Community Schools: After-School Curriculum Planning Resource Toolkit

<https://www.nccs.org/sites/default/files/resource/CurriculumPlanningToolkit.pdf>

Figure C1

**Instructional Framework:**

\*Instructional Framework chart modified from National Center for Community Schools: After-School Curriculum Planning Resource Toolkit  
<https://www.nccs.org/sites/default/files/resource/CurriculumPlanningToolkit.pdf>

Figure C2

**Appendix D**

Link to Amy Calverley's E-Portfolio

<https://sites.google.com/view/acalverley-portfolio/home>