

Critical Video Game Literacy Lesson Plans

Prepared for Middle School Teaching and Learning
Two Lesson Plans, At Home Reflection Activity, and a Self-Directed Learning Project

Overall Learning Goals and Objectives:

Through discussion, exploration, and creation, students will:

- Reflect on their relationship with video games and their video game playing habits;
- Discover, analyze, and reflect on the potential cognitive, motivational, emotional, and social benefits and costs of playing video games.
- Process and reflect on their relationship with video games and their video game habits;
- Critically analyze video game messages;
- Understand how video games target audiences and capture and hold our attention;
- Apply knowledge creatively and critically;
- Challenge video game messages and raise awareness of the positive and negative effects of video games through the creation of memes.

Students will demonstrate the ability to:

- Analyze and evaluate their video game playing experiences and habits;
- Recognize the effects of playing video games on our brains and bodies;
- Identify and negotiate the potential benefits and costs of playing video games.
- Analyze and evaluate video game messages;
- Identify the purpose, audience, and persuasive techniques of video game messages;
- Creatively and critically integrate information about video games through the production of media messages.

Note on SAMR:

The following activities have been designed to be implemented within any learning space, regardless of access to and comfort with technology. For each activity, suggestions are provided on how to *enhance* and/or *transform* the activity through the use of digital technologies. We refer to the **SAMR Model** (Puentedura) which provides a framework for the integration of technology for teaching and learning, from the *enhancement stage* (Substitution → Augmentation) to the *transformational stage* (Modification → Redefinition). Read more about the SAMR Model here: <https://technologyforlearners.com/the-samr-model/>

Note on REMOTE LEARNING:

For each activity, suggestions will also be made for facilitating learning within remote, synchronous learning spaces. Zoom and Google Meet are the applications these suggestions are based on.

LESSON ONE

Learning Goals and Objectives:

Through discussion, exploration, and creation, students will:

- Reflect on their relationship with video games and their video game playing habits;
- Discover, analyze, and reflect on the potential cognitive, motivational, emotional, and social benefits and costs of playing video games.

Students will demonstrate the ability to:

- Analyze and evaluate their video game playing experiences and habits;
- Recognize the effects of playing video games on our brains and bodies;
- Identify and negotiate the potential benefits and costs of playing video games.

Lesson Time:

One Class Period (45 minutes)

Agenda:

1. Activity One (10 min)
2. Video Lesson (10 min)
3. Activity Two (15 min)
4. Close out (10 min)

ACTIVITY ONE

Think, Pair, Share

This lesson is designed to establish the foundation for the work students will be doing at home, in LESSON TWO, and beyond, while also presenting students with the opportunity to explore their relationship with video games. Inquiry-based learning is used to encourage students' curiosity and to empower them to share and reflect on their own experiences. To frame this kind of learning experience and to prepare students for discussion and collaboration, engage the students in a brief *think, pair, share* activity.

Present students with the following discussion questions:

- What video games do we play?
- Why do we play video games?
- What do we like about video games?
- What do we not like about video games?
- How much time do we spend with video games?

Students should take a minute or two to think about the questions (*think*). Then students should find a partner to discuss the questions with for another two or three minutes (*pair*).

Finally, lead the students in a whole class discussion in which they share what they discovered (*share*).

SAMR: *Enhance* the activity by using an interactive poll or Padlet or Jamboard (Google Classroom) to allow students to respond to the discussion questions. [Poll Everywhere](#) and [Mentimeter](#) provide easy-to-use, free access to interactive polling, with fun presentation tools, like multiple choice, word clouds, and clickable images. After each poll question or at the end of the poll, students should find a partner to discuss their experiences with before returning to a whole class discussion.

REMOTE LEARNING: Utilize breakout rooms for group work. *See the SAMR note for ways to enhance the online learning experience.*

VIDEO LESSON

How Playing Video Games Affects Our Minds and Bodies

As a class, or remaining in their groups, students watch a video about the potentially positive and negative effects that playing video games has on our minds and bodies.

OPTION 1, one video: [Testing Gamer Vs. Non-Gamer Brains: How Do Video Games Affect You?](#) (Wired, 2018, 13:19)

This video offers a more in-depth exploration of the ways playing video games affect our minds and bodies, both positively and negatively. The video is rather long and produced for an older audience, but it has a playful style and balanced message.

OPTION 2, two videos: [Can Video Games Make You Smarter](#) (AsapSCIENCE, 2014, 4:14); [This is How Video Games are Secretly Affecting Your Brain](#) (Brainiac, 2019, 4:08)

These two videos together offer a balanced perspective on how playing video games affect our minds and bodies. They are both short, animation-based videos produced for younger audiences. *Can Video Games Make You Smarter* also contains some fun, interactive content.

ACTIVITY TWO

What are the Costs and Benefits of Playing Video Games?

Ask students to take one minute to think about these guiding questions:

- How might playing video games benefit us?
- How might playing video games cost us?

Then, break students into pairs or small groups.

Students discuss the questions. Based on the video(s) and their discussions, students list as many potential costs and benefits of playing video games that they can think of.

Have students write their costs and benefits on **post-it notes**. You may want to use one color post-it for costs and another color for benefits.

On chart paper or on a white board, draw a concept map/web illustrating the four benefit domains of gaming: cognitive, motivational, emotional, social (from *The Benefits of Gaming*, Granic, Lobel & Engels, 2014). You will likely need to explain each type of benefit and/or use simpler words, such as:

- Cognitive benefits = brain development, attention, problem-solving, creativity;
- Motivational benefits = persistence, resilience, responding to failure positively, striving for success;
- Emotional benefits = positive feelings, joy, mood management, learning to deal with anxiety and stress;
- Social benefits = building relationships, playing with friends and family, cooperation and collaboration, organization and leadership, working towards common goals.

*[See **APPENDIX 1** for a summary of the 2014 article The Benefits of Gaming and the four benefit domains of playing video games]*

Have students post their benefits (**the post-it notes**) on the concept map/web to correspond to the kind of benefit each word fits best.

Then, have the students post their costs to the concept map/web to the area they think that cost might impair or harm.

SAMR: *Enhance* the activity by utilizing Padlet (or a similar app) or Jamboard (Google Classroom). Have students post and organize the costs and benefits digitally.

REMOTE LEARNING: Utilize breakout rooms for teamwork. A shared Google Doc can provide a live, interactive means of capturing the costs and benefits that students generate. *See the SAMR note for ways to enhance the online learning experience.*

CLOSING CONVERSATION

Lead the students in a discussion, synthesizing the various reasons we play video games and the potential costs and benefits of playing video games. Possible discussion questions:

- Which area of the map is most important to you when you play video games? Why?

- How can we increase the benefits we receive from playing video games and decrease the costs?
- What kind of video games provide the most benefits, based on what we mapped out? What about the games you play?
- What kind of video games do you think cost us the most in regard to the areas of the map? What about the games you play?
- How can we improve the games we play to make them more beneficial and less costly?

SAMR: *Enhance* the closing conversation by asking students to post their responses in an interactive poll or Padlet or Jamboard (Google Classroom).

TO DO AT HOME

Video Game Use Inventory

Using a log sheet, students inventory their video game usage outside of school. The log sheet should have items for:

- Days and times that you played (a new entry for each unique gaming session)
- Title(s) of game(s) played each session
- Genre(s) of game(s) played each session
- How long you played each game during each session and total time for a session
- If you played alone or with friends/family
- If played with others, how many
- How you felt before/during/after each session (use emojis, if possible)

Students can use a worksheet or a shared Google Doc (**SAMR, *enhance***).

For an individual assessment, have students write a short reflection or reflection essay on the experience of logging the game playing, what they learned about their relationship with video games and their habits, and what they may want to change in the future.

Students can either take inventory of their video game usage over the course of a week, a few days, or one day:

- If you choose to make this a week-long inventory, you will either want to assign the inventory worksheet a week in advance of the implementation of these lessons or wait a week in between Lesson One and Lesson Two.
- *If you choose to make this a multi-day inventory*, you will either want to assign the inventory worksheet one or two days before Lesson One or wait two or three days between Lesson One and Lesson Two.
- *If you choose to make this a one-day inventory*, you will assign the inventory worksheet after Lesson One.

Ultimately, the goal is for students to have completed their inventories before Lesson Two, so that they may be incorporated into activities and discussions.

LESSON TWO

Learning Goals and Objectives:

Through discussion, exploration, and creation, students will:

- Process and reflect on their relationship with video games and their video game habits;
- Critically analyze video game messages;
- Understand how video games target audiences and capture and hold our attention;
- Apply knowledge creatively and critically;
- Challenge video game messages and raise awareness of the positive and negative effects of video games through the creation of memes.

Students will demonstrate the ability to:

- Analyze and evaluate video game messages;
- Identify the purpose, audience, and persuasive techniques of video game messages;
- Creatively and critically integrate information about video games through the production of media messages.

Lesson Time:

One Class Period (45 minutes)

Agenda:

1. Warm-up (5 min)
2. Activity One (15 min)
3. Activity Two (10 min)
4. Activity Three (10 min)
5. Close out (5 min)

WARM-UP ACTIVITY

Pose a question to the students: **What did we learn from our inventories about our video game habits?**

Students take turns sharing their response to the question or discuss their responses with a partner or in small groups.

If time permits, expand the discussion to include further questions, including:

- *Was it easy or difficult to be honest about your habits?*
- *Did you share these with your parents and were they surprised or not?*
- *What can we do with these inventories?*

SAMR: *Enhance* the conversation by using an interactive poll or Padlet to allow students to respond to the warm-up questions and facts and statistics. Poll Everywhere and Mentimeter provide easy-to-use, free access to interactive polling, with fun presentation tools, like multiple choice, word clouds, and clickable images.

REMOTE LEARNING: Utilize breakout rooms and chat to ensure every student has the opportunity to share. *See the SAMR note for ways to enhance the online learning experience.*

ACTIVITY ONE

Two Lies and a Truth

Break students into pairs or small groups. Students will “compete” against each other in a modified version of “Two Truths and a Lie”.

On a smartboard, whiteboard, or flip chart, present students with a series of rounds: each round should include one fact about video games and two fabrications about video games. Students must decide which of the “facts” is correct. The following are possible rounds for the game:

Round One:

1. Over 50% of people who play video games play them alone
2. **Over 70% of people who play video games play them with a friend**
3. Most of the video games that have come out lately are designed to be played alone

Round Two:

1. Losing in a video game makes most people want to give up or quit
2. Losing in a video game means you are bad at the game you are playing
3. **Losing in a video game often makes you want to come back and try again so you can do better later on.**

Round Three:

1. **Americans who are younger than 50 are twice as likely to play video games when compared to Americans age 50 and older.**
2. Adults play video games more frequently than kids do.
3. Most people don't have access to video games.

Round Four:

1. Adventure games are the most popular video games across all age groups.
2. Sports games are the most popular video games across all age groups.
3. **Puzzle and strategy games are the most popular video games across all age groups.**

Round Five:

1. American teenagers' average recreational screen time is less than 3 hours a day.
2. American teenagers' average recreational screen time is between 3 and 5 hours a day.
3. **American teenagers' average recreational screen time is over 7 hours a day.**

Round Six:

1. **In 2019, approximately 70% of 12 year-olds owned smartphones.**
2. In 2019, approximately 40% of 12 year-olds owned smartphones.

3. In 2019, approximately 25% of 12 year-olds owned smartphones.

Round Seven:

1. Statistics show that boys and girls play video games equally.
2. **Statistics show that boys play video games more than girls do.**
3. Statistics show that girls play video games more than boys do.

Round Eight:

1. People play video games most often on computers.
2. People play video games most often on home consoles.
3. **People play video games most often on mobile devices.**

Sourced from: McGonigal, 2011; [Entertainment Software Association, 2012](#); Granic, et al., 2014; [Perrin \(Pew Research Center\), 2018](#); [Common Sense Media, 2019](#)

Signs can be made that correspond to the numbers—1, 2 and 3—associated with the three pieces of information presented in each round. Each pair or group of students discuss the information presented and hold up one of the signs to indicate which (1, 2, or 3) they think is accurate.

Tally the points for each team. The winning team can be presented with a reward appropriate for your class or they get to select first in the next activity.

Discussion should follow each round, or selected rounds, about why students made their choice and what surprises them or not about the fact presented.

SAMR: Enhance the activity by using [Kahoot!](#), a free, game-based learning platform. Students can respond to questions or prompts in a pre-designed game, with points tallied based on correct answers and the time-lapsed for responding.

REMOTE LEARNING: You can utilize breakout rooms by sending students to their breakout rooms to discuss and choose an answer, and then bring them back to share their answers and have discussion. You could also have students compete within their breakout rooms and use a shared Google Doc to present each round and collect student responses. Better yet, combine the Kahoot! (*see SAMR*) with breakout rooms to enhance the online learning experience.

ACTIVITY TWO

Video Game Critical Analysis

In their pairs or groups, students watch a video game release trailer, then analyze the trailer using the five key media literacy questions (Center for Media Literacy):

- Who created this message?
- What is the purpose of this message?
- What creative techniques are used to attract my attention?
- How might different people understand this message differently from me?

- What lifestyles, values, and points of view are represented in, or omitted from, this message?

Students should also think about how the trailer appeals to specific audiences; what the world of the video game is like; who is represented in that world, and who is not.

Possible trailers to include in the activity:

- [Fortnite - Season X](#) (Fortnite, 2019, 1:11)
- [Animal Crossing: New Horizons](#) (Nintendo, 2019, 1:46)
- [Minecraft Nether Update](#) (Minecraft, 2020, 1:23)
- [Rocket League - Official 4K Cinematic](#) (GameSpot Trailers, 2020, 1:43)

If time permits, each group moves from station to station (or stays in place) analyzing different video game trailers.

Groups share what they discovered through their analysis and discussion. Present one final discussion question to the students: **How do video games capture and hold our attention?**

SAMR: *Enhance* the activity by utilizing Padlet or a similar app and have students post and organize their words digitally. *Transform* the activity by having students record their reactions and analyses as they watch the trailers, in the style of a video game playthrough. Students could use a free online video recording tool, such as Screencast-o-matic or Loom, or the video recording software on classroom devices.

REMOTE LEARNING: Utilize breakout rooms for teamwork. The guided worksheets can be shared as a Google Doc to provide a live, interactive means of capturing and sharing student work. Share links to the video game trailers in the chat or on the shared Google Doc. *See the SAMR note for ways to enhance and transform the online learning experience.*

ACTIVITY THREE

Critical Meme Creation

Working in pairs, or continuing in the same groups, students create a meme, or series of memes, that make a critical statement about one or more of the video games they spend time with (they can refer to their inventories).

Each meme should point out a truth about the video game or video games, the positive or negative effects of playing video games, myths about those effects, or something critical about the marketing of the video game or of the video game industry in general.

The goal of the activity is for students to apply their knowledge about and experiences playing video games within the context of memes, using the specific language of memes. Thus, they can be funny, snarky, droll, or serious. They should be both creative and critical.

Students can use popular meme images or images from the video games. They can also create their own images, if appropriate. Images can be printed as needed or printed ahead of time. Images could also be taken from magazines or other print sources.

Students share and discuss their memes.

SAMR: *Enhance* the activity by using a free online meme generator, such as Imgflip Meme Generator, or with a free online photo editing app, such as Pixlr.

REMOTE LEARNING: Utilize breakout rooms for teamwork. Use a shared Google Doc or Google Folder as a place to collect and share the completed memes. *See the SAMR note for ways to enhance the online learning experience.*

CLOSING CONVERSATION

As a closing discussion, exit ticket, or reflection assignment, ask students to think about and respond to the following questions:

- What would I like to change about my video game habits?
- What would I like to change about the video games I play?

SAMR: *Enhance* the closing conversation by asking students to post their responses in a Padlet, or similar app.

SELF-DIRECTED LEARNING PROJECT

This basic outline of a project-based learning experience is presented here as an example of how you could expand student learning beyond the two previous lessons. This is possible if you have the time to accommodate a multi-session project and if you and your students have access to the Internet and computer devices.

One of the goals of the project is for students to direct their own learning, so your comfort with the technology is less important than your students' interest and willingness to explore and experiment, though you may want to create your own project for your own edification and enjoyment.

Within the SAMR model framework, this project will transform student learning, as it presents them with the tools and opportunities to construct and express their learning in new and transformative ways.

Learning Goals and Objectives:

Through self-directed learning, students will:

- Experiment and create with new technologies (Twine);
- Explore their own interests and ideas;
- Perform research on self-selected topics and genres;
- Test, edit, and remix their projects to completion;
- Be able to creatively integrate learning and research;
- Be able to identify, troubleshoot and solve problems as they emerge;
- Be able to produce a completed project of their own design at their own pace and with little direction.

Lesson Time:

At home and/or over two or three class periods

Students will use [Twine](#)—a free, interactive game/story creator, which can be used online in a browser or offline with a download—to research, create, publish, and share an interactive game/story. Students can wireframe the basics of their game design with hyperlink buttons connecting passages, which can include text, image, video, or other creative elements. This tool doubles as a great way to learn about how the Internet is constructed and some basic coding language!

Students should use an inquiry question to guide their learning: **How might we create our own interactive stories to demonstrate our understanding of video games and the benefits and costs of playing video games?**

Students work individually or collaborate on the design and creation of a video game story (the world, characters, goals, problem/solution, actions, features, etc.). The challenge is that the students have to:

- Include and address at least two of the kinds of benefits;
- Include details about their own lives;
- Create a video game world that has characters, a setting, and is inclusive;
- And adapt it to a specific video game genre, such as:
 - Strategy (Age of Empires)
 - Puzzle (Candy Crush)
 - Sports (FIFA)
 - Simulation (The Sims)
 - Battle Royale (Minecraft)
 - Action/Adventure (The Legend of Zelda)
 - Role-Playing (Pokémon)

For instance, how might we design a game about getting ready for school within the Battle Royale genre? How might we include a social benefit: Could their game be multiplayer, in which they invite their friends? How might we include a cognitive benefit: Could their game include in-game tutorials on how to brush your teeth effectively?

It may be necessary to include a tutorial lesson, in which students are introduced to the platform, its affordances and limitations. You may also want the students to explore and learn the platform on their own by giving them a simple story idea to create within Twine, either individually or in pairs or small groups.

Also, as students begin to develop their story ideas and they're familiar with the platform, you may want to have them step away from the tool and plan/wireframe their stories using paper and string. This activity will keep them focused on their stories and the connections between passages.

Provide space within the classroom for students to share and test their games at different stages of development. Students should reflect on their games and provide each other with feedback on how to improve their game experiences.

When students complete their games, they should publish and share them on a classroom platform or blog. They can also share them on their social media platforms with their friends and families.

Spend a class period letting students play each other's games and celebrating their work. Students should also reflect on their experiences, successes, and challenges—this can be done as a written assignment or oral assignment.

Twine Resources:

- Twine platform: <http://twinery.org>
- Twine Wiki: <http://twinery.org/wiki/>
- Twine for Education Wiki page: <https://twinery.org/wiki/twine:education>
- Twine Cookbook: <http://twinery.org/cookbook/>
- Twine discussions on The Interactive Fiction Community Forum: <https://intfiction.org/c/authoring/twine/46>
- Harlowe 3.1.0 manual: <https://twine2.neocities.org>

Twine Literature:

Friedhoff, J. (2013). Untangling Twine: A Platform Study. In *DiGRA conference*.

Harvey, A. (2014). Twine's revolution: Democratization, depoliticization, and the queering of game design. *G | A | M | E Games as Art, Media, Entertainment*, 1(3).

Salter, A. (2016, May). Playing at empathy: Representing and experiencing emotional growth through Twine games. In *2016 IEEE International Conference on Serious Games and Applications for Health (SeGAH)* (pp. 1-8). IEEE.

Starks, K., Barker, D., & Cole, A. (2016, September). Using Twine as a Therapeutic Writing Tool for Creating Serious Games. In *Joint International Conference on Serious Games*(pp. 89-103). Springer, Cham.

Tran, K. M. (2016). "Her story was complex": A Twine workshop for ten-to twelve-year-old girls. *E-learning and Digital Media*, 13(5-6), 212-226.

Appendix 1

THE BENEFITS OF PLAYING VIDEO GAMES (2014)

Summary of Research

This highly cited article provides a summary of research on the positive effects of playing video games, drawing from the fields of developmental, positive, and social psychology, as well as media psychology. In contrast to decades of research into the negative effects of playing video games, the authors review the emergent body of research documenting the benefits of gaming. The article focuses on four main domains in which playing video games foster real-world benefits: cognitive (e.g., attention), motivational (e.g., resilience in the face of failure), emotional (e.g., mood management), and social (e.g., prosocial behavior) benefits.

Cognitive Benefits of Gaming

The authors survey several positive cognitive outcomes of playing video games within the literature: highly developed spatial skills, measurable changes in neural processing and efficiency, opportunities for developing problem-solving skills, and enhanced creativity. Different video game genres provide different degrees of cognitive benefits. For instance, shooter video games seem to affect spatial skills and neural processing more so than other genres, likely due to “the visually rich three-dimensional navigational spaces and the fast-paced demands that require split-second decision making and acute attention to unpredictable changes in context.” All video game genres, however, appear to provide the means for improving problem-solving skills and creativity. (pp. 68-70)

Motivational Benefits of Gaming

From their review of the literature, the authors find that “gaming environments may actually cultivate a persistent, optimistic motivational style” which may extend into school and work contexts. Video games provide a means for children to develop a healthy sense of their own intelligence as “something that can be cultivated through effort and time,” because video games provide children with “concrete, immediate feedback” on their choices and actions. As many video games use failure as a motivational tool, players develop persistence through the constant returning to the task of winning, and studies show that video game players often “respond to failures with excitement, interest, and joy” and relentless optimism. (pp. 70-71)

Emotional Benefits of Gaming

Drawing from uses and gratifications theory, the authors note that individuals use media “to manage their moods and to enhance their emotional states,” and they conclude from the literature that video games produce “some of the most intense positive emotional experiences” within children and youth. Further, the authors point to the benefits of experiencing positive emotions as the foundation for well-being and sources of inspiration and connectivity, based on Fredrickson’s (2001) broaden-and-build theory of positive emotions. Studies also show that video games allow players to practice modulating negative emotions and to develop adaptive

emotion-regulation strategies and skills. According to the authors, “game playing may promote the ability to flexibly and efficiently reappraise emotional experiences, teaching players the benefits of dealing with frustration and anxiety in adaptive ways.” (pp. 71-72)

Social Benefits of Gaming

Most gamers now play video games with a friend or with groups of friends, either cooperatively or competitively, as the most popular games (*World of Warcraft, Farmville, Minecraft, League of Legends, Call of Duty*, etc.) contain interactive, multiplayer affordances and immersive social contexts. The authors conclude that “gamers are rapidly learning social skills and prosocial behavior that might generalize to their peer and family relations outside the gaming environment.” The article also points to studies that demonstrate links between playing video games and increased civic engagement, as some video games promote the organizing and leading of groups of people in common causes and the players of those games “were more likely to be engaged in social and civic movements in their everyday lives.” (pp. 72-73)

Granic, I., Lobel, A., & Engels, R. (2014). The benefits of playing video games. *American Psychology*, 69(1), 66-78. doi: 10.1037/a0034857