Research Towards a Gaming Pathway to CCNY

A report to: partially funded by West Harlem Development Corporation and The Foundation for City College

Image from Virtual CCNY project led by Dalton Whiteside

June 2021
EXECUTIVE SUMMARY: Introduction

The goal of the study was to understand the role and impact that games, particularly video games, have on the lives of teens living in the communities of Harlem, Upper Manhattan, and the South Bronx. It was envisioned that the information from this study would inform the efforts of City College of New York (CCNY) to recruit students from these communities as well as the plans of Science and Arts Engagement New York (SAENY) to create an exhibit on game design and development in its Harlem Gallery of Science.

In December 2020, SAENY and CCNY retained Barry Joseph Consulting (BJC) to assist in developing the project’s research design and lead the data collection effort and analyses to follow. The research employed surveys, remote focus groups and 1:1 interviews. The research findings were also informed by a youth advisory composed of twenty young people who participated in a 4-session 10-hour after school program, co-developed and run with the Urban Arts Partnership’s School of Interactive Arts. Over five months, we engaged with high school students (N=70), college students, (N=109) and educators (N=25). This report details the key findings after five months of research.
For more information on the Gaming Pathways Project contact:

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- Susan Perkins, Ph.D. Dean, Division of Science CCNY, sperkins@ccny.cuny.edu

In addition, we want to acknowledge the important role played by Urban Arts Partnership in facilitating and carrying out the research for the project along with SAENY consultants. Ms. Milena Chakraverti-Wuerthwien who provided critical staff support throughout the project, Genesis Espinal for playing an important liaison role between the project team and SIA during the youth advisory program, and Veeshan Narinesingh, who provided valuable outreach to the Harlem community.

Funding for this project was provided by West Harlem Development Corporation, The Foundation for City College and Science and Arts Engagement New York, Inc.

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We designed the research activities around three lines of inquiry:

The first line of inquiry was to understand the relationship between video and tabletop games and area high school students (West Harlem, Upper Manhattan, and the South Bronx). Games of interest include both tabletop (e.g. Chess, dominos, Uno, Yu-Gi-Oh) and digital (e.g. Fortnite, Minecraft) games.

The second line of inquiry was to understand how to connect youth interest with CCNY opportunities while advancing CCNY’s ability to leverage gaming opportunities. These could be seen as two sides of the same coin - what youth need to gravitate towards CCNY and what CCNY needs to have in place to keep them there once they arrive.

The third line of inquiry was to advance game-related programming at the Harlem Gallery of Science.
Each line of inquiry has its own set of guiding questions. The first line of inquiry asked:

a. Are there demographic predictors for youth who are attracted to games and/or specific types of games?

b. How do youth interact with games and the broader gaming ecosystem?

c. What roles do games play in youth’s local communities? What roles do youth play within those activities? How much time do youth spend engaged with gaming activities when not directly playing? What are those game-related activities? What would youth want to change about gaming in their local community?

d. What role do games play in youth’s online communities? What roles do youth play within those activities? How much time do youth spend engaged with gaming activities when not directly playing? What are those game-related activities? What would youth want to change about gaming in their online communities?

e. How does their community and cultural background shape how they interface with gaming culture? What would youth like to change about the games they play?

f. What are the academic interests and aptitude of youth who play games (specifically in areas that intersect with gaming)? Do youth see any connections between their academics and their gaming?
The second line of inquiry asked:

a. How do youth understand games’ impact as a cultural force and as an economic force?

b. What are the currently existing academic pathways (both high school and collegiate) that build upon youth’s interest in gaming and/or their career plans related to gaming? Where are these opportunities?

c. How do youth view academic opportunities as a vehicle for them to pursue their interest in gaming and/or their career plans related to gaming or related fields?

The third line of inquiry asked:

a. What do youth say would be interesting and relevant to include in a future Science of Games exhibit?
EXECUTIVE SUMMARY: Findings

Through surveys, 1:1 interviews, focus groups, and a deep dive through an after school youth program, the process developed findings in four areas:

**Games & Me:** what youth are playing and how they use games to manage their feelings and shape their identity.

**Games & We:** where youth encounter games in their neighborhood and online communities, games’ local impact, and how youth’s cultural background intersects with gaming.

**My Future & Games:** how games impact society, youth’s academics (at both the high school and collegiate level), and youth’s plans for the future.

**A Gaming Exhibit:** what youth might look forward to from a local exhibit on video games and what they might learn from it.
Key findings about Games & Me: what youth are playing and how they use games to manage their feelings and shape their identity.

- While most teens play a wide variety of games, very few games are played by the majority. However, the youth are highly engaged in largely the same meta-gaming activities (e.g. watching game-related videos, chatting about games on Discord, listening to game-related music, etc.).

- Teens spend considerably less time playing and thinking about tabletop games.

- Tabletop games are seen by youth as just something to do while video games are part of the decisions youth make about who they want to be in the world. Video games are part of their identity. One youth shared something echoed by many: “Games have offered me a huge stepping stone in life that has made me who I am, and the knowledge that I gained from them will assist in my career in STEM via problem solving, critical thinking, and, most importantly, creativity.”

- When youth play video games away from adults, they are highly social. However, a large number of their comments are negative and self-critical.
Key findings about **Games & We**: where youth encounter games in their neighborhood and online communities, games’ local impact, and how youth’s cultural background intersects with gaming.

- Videos games are played throughout youth’s communities, most often in libraries, gaming stores, stores with electronics, cafes, at school, on public transportation, and occasionally in parks.

- Uniformly, teens recognize how games bring their community together. As one student said, “Video games help to connect people.”

- It was hard for youth to identify any significant differences between how games are played in their community versus others.

- When asked what they would like to change about games in their community, their interest in expanding accessibility and inclusivity stood out.
Key findings about **My Future & Games**: how games impact society, youth’s academics (at both the high school and collegiate level), and youth’s plans for the future.

- Teens consistently report being angered and devalued by experiences with both sexism and racism in gaming communities. Their most common short-term responses were to either leave or silence their microphone. Their long-term strategy is to hide their identity.

- Teens are very aware of how games in the classroom empower their learning. They appreciate how it teaches new skills and content while providing an effective way to review material. They are most likely to encounter gaming in their courses through competitive, quiz platforms, like Kahoot or Quizziz, which they adore. Meanwhile, youth desire content-specific game-based learning opportunities to go deeper into specific skill sets or academic content areas across all of their class subjects.

- Games don’t have a common home within most schools. While game coding might be taught in a Computer class, students are just as likely to play an escape room in World Studies, learn engineering through Minecraft, or use Duolingo to learn a Spanish.
NYC educators are not oblivious to the impact games have in the lives of their students. However, the exact details remain obscured to them. They highlight the same benefits identified by the youth - games as both community unifier and a source of relaxation – yet many were concerned that there are “not enough educators comfortable” with the idea of bringing games into their classrooms, concerned that they are “all just a waste of time.”

Educators identified STEM as the only academic content that might speak to high school students’ interest in gaming; this is in direct contrast with youth, who would be challenged to find a subject that games can’t enhance. Yet, when these same educators are asked about game-related opportunities at college, they offered a broad range of non-STEM example such as design, business, political science, pre-law, English, communications, and event production.

Educators see their job as helping youth connect their gaming interest with academic and career opportunities. To play this role they ask for curriculum to bring games into classrooms across the disciplines; for internships to connect youth with industry; and for resources for offering after school programs within their schools.
The majority of CCNY students (57%) report that their interest in gaming has influenced their current academic trajectory.

Among those students, roughly one-third identified a trajectory aimed towards work in the video game industry through STEM-related departments. The remaining two-thirds named a wide range of fields for a career outside of gaming: engineering, computer science, graphic design, interactive design, education, law, sociology, medicine, and more.

The gaming industry is the number one influence that helped these students connect their gaming interest with their academic studies, equally split between both game designers and professional YouTubers. The second most named influencers are their professors and their experiences at other universities.

When asked how CCNY can better speak to students’ gaming interests, the top responses related to academics (courses, certificates, degrees), often in a multidisciplinary format. The second most common request was to advance both social gaming and eSports. Third on the list was building connections with the gaming industry.
Key findings about **A Gaming Exhibit**: *what youth might look forward to from a local exhibit on video games and what they might learn from it.*

- Youth are enthusiastic to inform the future development of an exhibit about games.
- When youth considered topics of interest, they fell into three categories:
  - Games as product (like the History of Video Games)
  - Using games to address a game-adjacent topic (like gaming in education)
  - Game design as subject matter (like how games give player’s choices)
EXECUTIVE SUMMARY: Methodology

This research focused on NYC high school students, college students, and educators.

We partnered with the School of Interactive Arts (SIA), an after school program of the Urban Arts Partnership focused on the art and science of game development that had successfully pivoted to online learning during the pandemic. SIA recruited students from their existing programs, provided a co-instructor and a learning environment within Discord, and general support. For 10 hours, over four sessions, we met with 20 high school students. We discussed their survey responses on topics related to the three lines of inquiry and provided individual and group assignments to dig deeper. We called it the G.A. (the Gaming Advisory).

SIA also shared a survey among their other after school students (N=20) and a smaller version of that survey among high schools which offer SIA (N=10).

At the same time, we met with youth over Zoom for one-hour focus groups targeting three different communities: West Harlem (N=5), the Bronx (N=9), and Washington Heights/Inwood (N=6).
For college students, we sent out a survey to all CCNY students (and with support of their eSports Club) on a range of topics (N=109), ran a focus group of CCNY students over Zoom (N=9), and then ran a second survey targeted to the eSports Club (N=21).

For high school educators, we sent out a survey (N=21) and then interviewed them over Zoom (N=4).
EXECUTIVE SUMMARY: How to use this report

If you are more interested in how to put findings into action, then *The Gaming Pathway to CCNY Strategy Recommendations* might be of more interest.

If, however, you want to get into the details, then please read on.

There are four sections that explore findings and recommendations around each of the areas that emerged (listed across the top, each as a clickable navigation button). Within each, artifacts from the research will be shared to support the findings and provide context for you to glean on your own (again, with each section containing clickable buttons).

The end of the document contains a robust archive of key graphs from the surveys and artifacts from The GA. It will also include the demographic make up of some of the research groups.

Please keep in mind the findings are not designed to be scientific nor comprehensive but illustrative and suggestive. The response rates are often not high enough to represent all of their community. These were not randomly assigned groups; we aimed to balance by gender and reproduce the ethnic make-up of the three geographic communities.
GAMES & ME

This section is based upon research with NYC high school students, specifically through the G.A., the three geographic focus groups, and the SIA surveys.

The G.A. was asked to list video games they play. They identified 69. We then asked a larger group of youth (including the G.A.) to select all played in the past year. We were surprised to learn that most were playing games not shared by the majority. In fact only two of those 69 games were played by a majority of the survey respondents. That means most teens are playing games within a small niche.

They all report engaging in a wide range of meta-gaming activities (like watching gaming videos on Youtube); in fact, the majority of them engaged with most of the activities listed. In other words, while they are playing different video games from each other, they are engaged in the same type of meta-game activities.

Meanwhile, the teens played many fewer tabletop games. Games like cards or board games were described as an activity to do, a way to socialize with others. Most were not engaged in tabletop meta-gaming activities, like watching videos about game tactics. In the end, between video games and tabletop games, tabletop games are seen as something to do while video games are part of the decisions youth make about who they want to be in the world. Video games are part of their identity.
We asked the G.A. to share sounds they make while playing video games when they thought their caregivers were not listening; their responses were turned into comic strips (by us) for discussion and analysis.

We tagged their responses by both tone (Aggressive/Mad/Negative vs. Friendly/Inquisitive) and audience (Opponents, Teammates/Friends, the Game, Themselves).

We combined those two into an X/Y axis, and every box was filled. There was at least one comment for every possible combination. But the largest number of comments clearly fell into one box: negative comments directed towards themselves.

This led to an exploration with the G.A. of how youth use games to manage their feelings, often with intention. If they are feeling upset, they might choose to avoid highly competitive games. If they are feeling down, they might play a quirky game to perk themselves up.

Much of this, if not all, is occurring outside the awareness of the caregivers around them.
Recommendations for recruiting students to CCNY

- While SAENY has a specific interest in STEM, there are clear opportunities here to address the socio-emotional learning side of their engagement with games, to build their resiliency and capacity.

- The way youth are aware they use games to negotiate and manage their emotions might inform an outreach campaign.

- Youth need assistance to better understand the agency they enact every day when shaping their identities through games; this could also inform an outreach campaign.

- Spread awareness within CCNY that games are not just a distinct product, but are also a tool for socializing and a portal into a rich vein of game-related activities (many of which take more of teen’s times than playing games themselves).

- Tabletop games are fascinating. But the low hanging fruit is just within video games. Keep the focus strictly on the digital.
Recommendations for an exhibit on “The Science of Games”:

- Treat YouTube and Twitch celebrities as the DUNK! exhibit treats athletes
- Create and manage an exhibit-related Discord server. It’s where youth are.
- Incorporate game music in the exhibit, as a subject and connected to science.
- Consider the science of multitasking, leveraging the format of Let’s Play videos. Create an interactive in which visitors make 10 second videos that includes an analysis of their minds when multitasking.
When it comes to the videos games I most often play, I consider myself a:

- 1. Expert
- 2. Frequent Gamer
- 3. Casual Gamer
- 4. Novice

Video games are part of teen’s identity.

Tabletop games, however, are most often spoken about as something fun and social, but nothing deeper.
These results combine responses from members of the G.A, their peers in the high school SIA programs and host schools (N=51).

Among 69 games played in the last year (initially identified by the G.A.), only two were played by a majority of the survey respondents. In addition, only a small number are played by more than 1/3, suggesting there are many game niches (often within different gaming genres).

### Top 10 Video Games

<table>
<thead>
<tr>
<th>VIDEO GAME</th>
<th>GAME GENRE</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among Us</td>
<td>Party, Social Deduction</td>
<td>43</td>
<td>84.31%</td>
</tr>
<tr>
<td>Minecraft</td>
<td>Sandbox, Survival</td>
<td>33</td>
<td>64.71%</td>
</tr>
<tr>
<td>Fortnite</td>
<td>Survival, Battle Royale, Sandbox</td>
<td>21</td>
<td>41.18%</td>
</tr>
<tr>
<td>Mario Kart</td>
<td>Racing</td>
<td>21</td>
<td>41.18%</td>
</tr>
<tr>
<td>Super Smash Bros.</td>
<td>Fighting</td>
<td>21</td>
<td>41.18%</td>
</tr>
<tr>
<td>Call of Duty</td>
<td>First-Person Shooter</td>
<td>20</td>
<td>39.22%</td>
</tr>
<tr>
<td>Roblox</td>
<td>Game Creation System, Massively Multiplayer Online</td>
<td>20</td>
<td>39.22%</td>
</tr>
<tr>
<td>Animal Crossing</td>
<td>Social Simulation</td>
<td>19</td>
<td>37.25%</td>
</tr>
<tr>
<td>Genshin Impact</td>
<td>Action Role-Playing</td>
<td>18</td>
<td>35.29%</td>
</tr>
<tr>
<td>Pokemon</td>
<td>Role-Playing</td>
<td>18</td>
<td>35.29%</td>
</tr>
</tbody>
</table>
### Top 10 Tabletop Games

<table>
<thead>
<tr>
<th>TABLETOP GAMES</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uno</td>
<td>40</td>
<td>78.43%</td>
</tr>
<tr>
<td>Chess</td>
<td>33</td>
<td>64.71%</td>
</tr>
<tr>
<td>Connect Four</td>
<td>25</td>
<td>49.02%</td>
</tr>
<tr>
<td>Monopoly</td>
<td>24</td>
<td>47.06%</td>
</tr>
<tr>
<td>Battleship</td>
<td>14</td>
<td>27.45%</td>
</tr>
<tr>
<td>Blackjack</td>
<td>13</td>
<td>25.49%</td>
</tr>
<tr>
<td>Scrabble</td>
<td>13</td>
<td>25.49%</td>
</tr>
<tr>
<td>The Game of Life</td>
<td>11</td>
<td>21.57%</td>
</tr>
<tr>
<td>Crazy 8s</td>
<td>10</td>
<td>19.61%</td>
</tr>
<tr>
<td>Sorry</td>
<td>10</td>
<td>19.61%</td>
</tr>
</tbody>
</table>

These results combine responses from members of the G.A., their peers in the high school SIA programs and host schools (N=51).

Among 21 games played in the last year (initially identified by the G.A.), only two were played by a majority of the survey respondents.
What teens say when playing games and think caregivers are not listening

We asked the G.A. to share sounds they make when playing video games when they thought their caregivers were not listening, and then share why. Their responses were turned into comic strips (by us) for discussion and analysis. (view more in the Appendix)
Games & Me

Executive Summary

Findings

Games & We

Recommendations

My Future & Games

Games Played

A Gaming Exhibit

Sounds They Make

Meta-Gaming

Appendix

Game-driven Narratives

**TONE**

**Aggressive**

Mad

Negative

**Friendly**

Inquisitive

16 of the 25 comments (64%) were negative.
12 of the 30 responses were directed towards themselves (40%).

The same number were directed towards other players.
This and the next two slides collect quotes from the G.A. from our conversations about the sounds they make when playing games (with a few quotes added from the focus groups and SIA surveys).

Ezen: I got this big inspiration to make a game, all off of one Kingdom Hearts game and a session of cutting grass with some shears...

Daniel: For me games bring out determination... I’m not passionate about most things [like] school.. [But] in games like Celeste or Hollow Knight, you keep dying and dying and then I always got to bounce back. And then it’s fun. It’s really fun struggling. Ah, that sounds really weird to say! But it’s fun to struggle and then you do well.

Ceyda: Games contribute to my communication skills. I am an awkward person, so when I can relate to someone through a game, it’s pretty fun.

Johandra: The animation within games amazes me, same with story telling, and how they help the player connect with the story or others. It just makes me want to create something that helps others too, from an artistic standpoint.

SIA student: Playing video games usually eliminates the feeling that I have to think before I say something, which I am always reminding myself of. In video games... the fear of how I’ll be perceived isn’t a factor, so it’s easier to express myself more honestly and instinctively.

Ezen: I used to play a lot of Kingdom Hearts, and there’s a lot of themes of friendships in there, right? This may sound corny, but like, that really helped me to really grab the concept of friendships and how important that is.
<table>
<thead>
<tr>
<th>SIA student: When I feel burnt out or uninspired, games are able to pick me back up and give me some new ideas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johandra: games in a way tie to our mental state/health.</td>
</tr>
<tr>
<td>Daniel: That's why I stay away from online games when I'm feeling down.</td>
</tr>
<tr>
<td>Lee: Honestly I almost do the opposite; a single player game that I love and know I'm good at could be the thing to lift me up.</td>
</tr>
<tr>
<td>Ezen: Difficulty in gaming is like a spice. And the spicier it is, is like: How much can you take before you burn out?</td>
</tr>
<tr>
<td>Nicole: Some games just make me so happy, those are the ones I want to play the most.</td>
</tr>
<tr>
<td>SIA student: I practically use games 24/7 to manage my emotional life</td>
</tr>
<tr>
<td>Focus group: When you're playing a game, it reveals how confident you are deep inside.</td>
</tr>
<tr>
<td>Jaylen: With games like Dark Souls I absolutely love them because it is very noticeable when you improve and that feeling is amazing.</td>
</tr>
<tr>
<td>SIA student: I use games to help me just vibe with the peace</td>
</tr>
<tr>
<td>SIA student: Some specific story games, for example, may highlight insecurities in myself and have moving emotional narratives that provide insight into what I may be dealing with outside of the game.</td>
</tr>
<tr>
<td>Nicole: Some games just make me so happy, those are the ones I want to play the most.</td>
</tr>
<tr>
<td>SIA student: When I am tired, or sad, as soon as I am in a game everything just disappears, and it can change my mood really fast.</td>
</tr>
<tr>
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</tr>
<tr>
<td>SIA student: When I am tired, or sad, as soon as I am in a game everything just disappears, and it can change my mood really fast.</td>
</tr>
<tr>
<td>SIA student: I use games to manage my emotional [life] by basically using it as an &quot;escape&quot; from increasing schoolwork and (mostly due to the pandemic) to pass the time working on my island in Animal Crossing, play a few ranked matches in Splatoon, or get on the phone with some friends and play Smash or Minecraft and have a blast.</td>
</tr>
<tr>
<td>Focus group: When you're playing a game, it reveals how confident you are deep inside.</td>
</tr>
<tr>
<td>Jaylen: With games like Dark Souls I absolutely love them because it is very noticeable when you improve and that feeling is amazing.</td>
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</tr>
</tbody>
</table>
Daniel: Games bring that rage out of everyone because you put time into it, so when you die or lose you feel like it’s an attack on you as a person sometimes.

Johandra: Games are an outlet for many to vent or let out frustration. It can be tough due to circumstances or just being busy all the time. So it gives us a reason/opportunity to release it.

Johandra: I don’t play aggressive games like multiplayer FPS because it seems like a hostile environment.

Daniel: I try to stay away sometimes from multiplayer games because they bring a lot of rage from me whenever I start drying… It’s emotionally draining sometimes. Compared to games like Outer Wilds, where you’re just hopping from planet to planet - that’s relaxing and interesting.

Ezen: [In] the fighting games, it’s one person against one other person. So you put all your frustration towards that one person… I don’t play those kinds of games for long because I feel like it damages me… I just gotta relax.

Ceyda: I sort of like aggressive/frustrating games cause it kind of makes me wanna play until i win

Nicole: People would rather hurt themselves than others

Johandra: I’m a female and I try not to rage and control what I say XD
Please select all of the things you have done in the past year due to your interest in video games:

<table>
<thead>
<tr>
<th>Activity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watched videos on YouTube</td>
<td>49</td>
<td>96.08%</td>
</tr>
<tr>
<td>Talked about games on Discord</td>
<td>38</td>
<td>74.51%</td>
</tr>
<tr>
<td>Listened to video game music</td>
<td>35</td>
<td>68.63%</td>
</tr>
<tr>
<td>Watched recorded gameplays/walkthroughs</td>
<td>35</td>
<td>68.63%</td>
</tr>
<tr>
<td>Talked about games (in person)</td>
<td>34</td>
<td>66.67%</td>
</tr>
<tr>
<td>Watched Let’s Play videos</td>
<td>33</td>
<td>64.71%</td>
</tr>
<tr>
<td>Searched for tips and tricks</td>
<td>32</td>
<td>62.75%</td>
</tr>
<tr>
<td>Watched video game news</td>
<td>31</td>
<td>60.78%</td>
</tr>
<tr>
<td>Watched videos on Twitch</td>
<td>31</td>
<td>60.78%</td>
</tr>
<tr>
<td>Watched live streams of gameplays</td>
<td>30</td>
<td>58.82%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewed video game visual art</td>
<td>27</td>
<td>52.94%</td>
</tr>
<tr>
<td>Watched videos on game design</td>
<td>26</td>
<td>50.98%</td>
</tr>
<tr>
<td>Designed video games</td>
<td>25</td>
<td>49.02%</td>
</tr>
<tr>
<td>Read gaming news</td>
<td>23</td>
<td>45.10%</td>
</tr>
<tr>
<td>Made video game visual art</td>
<td>20</td>
<td>39.22%</td>
</tr>
<tr>
<td>Participated in a particular game’s fan community</td>
<td>20</td>
<td>39.22%</td>
</tr>
<tr>
<td>Watched eSports or other video game competitions</td>
<td>17</td>
<td>33.33%</td>
</tr>
<tr>
<td>Made a game-related purchase that is not the game itself</td>
<td>14</td>
<td>27.45%</td>
</tr>
<tr>
<td>Made video game music</td>
<td>10</td>
<td>19.61%</td>
</tr>
<tr>
<td>Competed in eSports or other competitions</td>
<td>5</td>
<td>9.80%</td>
</tr>
</tbody>
</table>

While they largely play different games from one another, the vast majority of these teens are engaged in the same diverse collection of video game-related activities. (These same teens are rarely engaged with similar tabletop activities.) (N=51)
To better understand the personal narratives youth construct using games, we asked the three youth focus groups and in the all-SIA student survey the following question:

**How do games help you be who you want to be in the world?**

Many games make me learn things about myself or others.

I’m quite introverted, so games help me connect and make friends with others.

Games give a sense of empowerment through intelligence and perseverance that the player can then use to be motivated to explore different options in life.

Games are... where I learned how to think rationally before I act, how to interact socially with others, and ultimately builds both my mentality and physicality.

Games expose you to problems and you have to find solutions. That activates the problem solving skills in your brain, which helps you cope with problems in real life as well.

Games can help me learn how to express art and ideas in interactive ways.

Gaming has helped me be who I want to be by giving me the "drive" to do the best that I can. From back in the era of the Wii and Nintendo DS, I attempted to 100% complete every game I own.

Gaming lets me solve problems and legitimizes a sense of accomplishment that I use as motivation in my future endeavors.

[Games] can let players feel like they have a place where they can be who they want to be and can make an impact on their environment, an idea that some people lose when they become adults.
Games have offered [me] a huge stepping stone in life that has made me who I am, and... the knowledge that I gained from them will assist in my career in STEM via problem solving, critical thinking, and most importantly - creativity.

Games have inspired me to pursue programming. In fact, I first started learning after seeing redstone in Minecraft!

Playing [Counter-Strike: Global Offensive at semi-pro level] requires me to work with others, problem-solve, put in hard-work during practice time and my own time, and make connections with others because I have to work with them. This will help a lot in the real world, because I learn to work with others even if I don't like them, and I also am prepared to put in a lot of work into things to be the best that I can be.

I personally want to work in the emergency room. So I feel like when you play games... you need critical thinking, you need to think fast before you lose the game. And those are some of the things that you need as a PA.

You practice strategy [in strategy games] and different ways to approach a situation; I started applying that to my life.

Games help us be who we want to be in the world... It makes you feel like really good about yourself and it makes you want to keep going, like in Apex [Legends], right? Let's say you've been having a bunch of good games lately. You want to keep the streak going... And I feel like because of that, that can relate to real life when you do things that are rewarding, like you're struggling in math, but you're starting to get a hang of it, [and] you finally feel like you caught up with everyone [and you have] that rewarding feeling - you can kind of trace those two together.

I play a lot of those games when you have to find clues, like Uncharted. That has helped me find evidence, say, in an English paper [or] when looking for evidence in math problems. It helps me spot the problems.
The G.A. created Social Mechanic Ecosystems. In this one the student chose *Legend of Zelda: Breath of the Wild*. *LoZ* helps this student be an artist (drawing *LoZ*-related art) and a singer (of *LoZ* melodies), a consumer of *LoZ* gameplay videos and *LoZ*-music, and a “learner” of videos that use *LoZ* to teach game design.

In “Me & My Game,” this teen says *LoZ* helps them be someone who can take inspiration, wonder and learning from one source then apply it somewhere else in order to better themselves and others.

More Social Mechanic Ecosystems can be viewed in the Appendix.
GAMES & WE

This section is based upon research with NYC high school students, specifically through the G.A., the three geographic focus groups, and the SIA surveys. In the G.A. we asked the members to grab a screen shot from Google Maps then trace an imagined path across this community, identifying all the places they might encounter games.

In surveys, we asked them to describe the role games play in their community, and in the G.A. we discussed their responses. It was hard for them to think about games outside their home and in schools - at first saying it was rare to see them, or it was too dangerous to have them in public ("What kind of mad person plays games on a subway? Keep it in your dang bag, man"). Given time and the right prompts, however, they eventually described how ubiquitous gaming is throughout their communities.

We also asked them what their communities would lose without video games. Uniformly, they recognized how games bring their community together. As one student said, “Video games help to connect people.”
Recommendations for recruiting students to CCNY

- Their community maps reveal many locations in their community for spreading game-related outreach and recruitment materials: libraries, gaming stores, stores with electronics, cafes, school, and public transportation.

- When engaging the community in the importance of games, emphasize their power to connect, inspire, de-stress, and support self-expression.

- There was little evidence that video games differed by geographic community in any way significant to CCNY’s interests.

- Pull from needs identified in this research to make CCNY a gaming-friendly campus.

Recommendations for an exhibit on “The Science of Games”:

- Their community maps reveal many locations in their community for spreading the word about a Science of Games exhibit: libraries, gaming stores, stores with electronics, cafes, school, and public transportation.
What would your communities lose without video games?

Sense of connection is by far the most common benefit the G.A. saw video games bring to their communities. Students were able to choose more than one option. (N=16)

Sense of connections
Excitement
Self-expression
Stress release
Interesting conversations
Public opinion
School motivation
Playful competition
Art appreciation

Games connect students from the US to youth and family from their native countries. **HS Teacher**

Sometimes I’ll see someone around my age or older with something from a game that I recognize, and I’ll be wearing something that they’ll recognize, and we’ll both just nod in agreement as we both walk by.
Are videos games played differently in other communities?

There was little evidence that video games differed by geographic community in any way significant to CCNY’s interests.

No: 7
Yes: 5
Other: 4

There just might be a different most popular game.

I would think that Smash would be played with more people, and have a greater emphasis on competition than anything else.

Some people play Minecraft in different ways.

Where I live there are a lot of people who speak Spanish and Chinese, so they might play the same games but in a different language.
Is there anything you would like to change about how video games impact your community and, if so, what?

This was asked as an open question to the G.A. The responses were put into a new survey and all were asked to respond. Students were able to choose more than one option. Their interest in expanding accessibility and inclusivity within their community stands out. (N=16)

- Increase accessibility (12)
- Create inclusivity policies (7)
- Play more often (6)
- Change how games and gamers are viewed (5)
- Reduce competitiveness (4)
- Increase positive social impact (4)
- Reduce gamer "addiction" (4)
- No change

Disabled people ... should be able to play some type of video game without being left out.

The majority of the gaming industry is still male, white, and cis. [I want to see] a little bit more diversity behind the works.

Gamers are viewed in a very negative light due to scandals and stereotypes.

What have games done on a global scale [to] change policy or [make] social commentary about what's going on?
When and where do you see video games in the online communities where you spend your time? (N=16)

<table>
<thead>
<tr>
<th>Platform</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youtube</td>
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<tr>
<td>Discord</td>
<td>6</td>
</tr>
<tr>
<td>Twitch</td>
<td>2</td>
</tr>
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<td>Instagram</td>
<td>2</td>
</tr>
<tr>
<td>Twitter</td>
<td>2</td>
</tr>
<tr>
<td>TikTok</td>
<td>2</td>
</tr>
</tbody>
</table>

In conversations about what students would want to change about their online gaming communities, a common theme was that they wanted to address issues of toxic gaming environments.

Is there anything you would like to change about how video games impact your online communities and, if so, what?

- Make less toxic
- Make more welcoming to newcomers
- Reduce hateful speech
- Keep politics out of game conversations
- Make gaming more fun and less competitive
- Reduce sexism
This is a composite map, based on the most common locations identified across all youth maps. The quotes are all taken from their maps. A list of locations and quotes was given to one of the students who, upon request, created this map.

The next page is one example from a student, with narration. To view them all click here.
“So the person starts off at the library, where they're just kind of like searching up different games. And then they move on to the train station where they see some people playing on their switch. And then they move on to the boba shop. And they're just like watching a playthrough video in the store window, since some boba shops play TVs. And then they move into a restaurant where they eat some food and they see a child playing on their iPad, because I feel like we've all seen that before. And then they move on to Anime Castle, which is basically like an anime store and they see someone buy a game figure, probably some sort of droid from Zelda. And then they move on to Flushing High School where they see a gaming club, like talking and playing games, and then they're at home.”
MY FUTURE & GAMES

This section is based upon research with NYC high school students (specifically through the G.A., the three geographic focus groups, and the SIA surveys), CCNY college students, and NYC high school educators.

In the G.A. we explored where the prejudice of others impacted their relationship with games. Sexism against female players was the most common concern raised, followed by racism. They consistently reported being angered and devalued by these experiences, and the sense of powerlessness that accompanied them. Their most common short-term responses were to either leave the game or silence their microphone. Their long-term strategy is to hide - to hide their femininity, to play worse if they are a girl, and other tactics that hide their identity.

Few confronted the prejudice directly and none did so successfully. If pushed, the males can talk about witnessing the sexism and their guilt at not intervening. For many it is a reflection of prejudice in the wide-world and becomes a training ground for the general powerlessness they feel about doing anything about it.
When it comes to games and school, that is a different story. As the expression goes: “I wish there were less games in my school” said no student ever.

So perhaps there is little surprise in the finding that, according to the Gaming Advisory, youth wish games were infused throughout their school day.

What is interesting, however, is why.

Yes, they identify that gaming can be fun, helps them relax, and forms social bonds.

But they are also highly aware of how games empower their academic learning.

Digital games are infused enough into their academic coursework that they can appreciate how it teaches new skills and content while providing an effective way to review material.

They do not understand, however, why their schools leave the power of games-based learning largely untapped.
In general, according to the G.A., they are most likely to encounter gaming in their courses through competitive, content-agnostic, cloud-based quiz platforms, like Kahoot or Quizziz. Youth often view these as an almost magical force that drives both learning and engagement.

Meanwhile, youth desire content-specific game-based learning opportunities, to go deeper into specific skill sets or academic content areas.

In addition, games don’t have a common home within most schools. While game coding might be taught in a Computer class, students are just as likely to play an escape room in World Studies, learn engineering through Minecraft, or use Duolingo to learn a new language.

As a result, the greatest potential for institutions of higher learning to leverage youth’s academic interests inspired by gaming might lay, ironically, within their informal after school spaces.
Meanwhile, according to our surveys and interviews, NYC educators are not oblivious to the impact games have in the lives of their students. However, the exact details remain obscured to them. Most we heard from could not share much about topics like the games students play, their game-adjacent activities, or how their gaming is shaped by their backgrounds.

They did, however, highlight the same benefits identified by the youth - games as both community unifier and a source of relaxation. Only a few teachers were able to speak to the racism students experience in online anonymous game communities and through biased game representation. One after school educator highlighted the value of the “social-emotional aspects of gaming… as kids grow up and try to find themselves.”

Most did not report seeing any correlation between students’ academic interests and the games they like to play. At the same time, one teacher lamented a missed opportunity for getting games like Civ 6 into global history courses because there are “not enough educators comfortable” with the idea. That discomfort was described by one teachers as the “misconception that it’s all just a waste of time. And that it’s anti social.”
When asked “Do you see any existing academic pathways in high school that build upon youth’s interest in gaming and/or their career plans related to gaming?” only half could list an example. All were STEM-related save one (videography).

The percentage offering examples raised from half to 75% when the question shifted from seeing academic pathways in high school to college. More striking was the broad range of non-STEM examples (many within game-adjacent fields) such as design, business, political science, pre-law, English, communications, and event production. When asked “In the past year, have you encouraged any students to pursue any of these pathways?” the majority said they had, directing them to after school programs and higher education opportunities.

Nearly all agreed that they see “overlooked opportunities for building on students' interest in gaming to advance them on their academic and career pathway.” The challenge, as one teacher framed it, is that “most of the students that we serve look at video games from the consumer side.” The job then of educators, as they described it, is to help their students make a connection between their gaming interest and their future. “I believe that it’s us educators that need to really talk to these kids about the potential of games.”
For educators to play this role they asked for curriculum to bring games into classrooms across the disciplines; for internships to connect youth with industry; and for resources for offering after school programs within their schools.

While most educators were focused on the student experience within high school, one college counselor reported the following, in regards to the opportunity to inspire interest among teens in CCNY through their passion for gaming:

Exposure to something like sociology research in the gaming community is something that my students have no concept of. They have no idea what that would even mean. And I had some kids last year go to City College, not related to game design, but just financial support. Wraparound support, in an institution like that, especially for first generation students, I think is huge... You really have to learn to navigate the different parts of that institution... and once you kind of feel a little lost, [or] if you don't feel supported,... or if you don't feel like there's much of a point, you're just not going to keep going... Between their freshman year and the six month point, in terms of retention, we lose 40% of kids, and we have no control over that.

She's probably right. She has little control over what happens once they arrive at college.

But CCNY does.
We have just reviewed findings in this section from high school students and educators. Now we will review findings from current CCNY students. In the survey completed by 104 CCNY students, we asked “Is there anything about your current or past interest in gaming that influenced your current academic trajectory?” While one third said gaming had no influence (34%), the majority (57%) said games had in fact influenced their current trajectory.

Among the 41 who named a specific academic trajectory, roughly one third (15) identified a trajectory aimed towards work in the video game industry, through computer engineering, software engineering, mechanical engineering, and computer science. Specific roles identified as goals within the gaming industry include game designer, creative director, video game trailer editor, illustrator, game story writer, and professional eSports player. One respondent shared a comment with a sentiment common to many: “My current interest in gaming is what led to me deciding on majoring in computer science.” Yet, when it comes to game design itself, one student shared, “Sadly I can’t find any classes that would help me with that here at CCNY.”

The remaining two-thirds (26) named a wide range of fields for a career outside of gaming: engineering, computer science, mathematics, mechanical engineering, graphic design, interactive design, education, law, social sciences, sociology, storytelling, comic books, medicine, and psychology. Academic interests inspired by gaming is vast and broad.
Among CCNY students whose academic trajectory was influenced by video games (N=59), the majority (63%) named at least one type of person or institution who helped them to make that connection. So what can this tell us about who is influencing high school students to pursue interests inspired by games at the college level?

The number one influence is by far from the gaming industry itself (23%), equally split between both game designers and professional YouTubers. When it comes to game designers, students easily listed both companies (like Nintendo and Bungie) and iconic game designers (like Notch and Shigeru Miyamoto) as role models and influencers. Meanwhile, individual YouTubers and streamers help them understand game design in a more sophisticated way, raise awareness about career opportunities, and inspire them to move from consumers to creators.

The second most named influencers who helped students connect their gaming interests with their studies at CCNY are their professors and their experiences at other universities (19%). They specifically name-checked CCNY’s Sonic Arts Center, the Fashion Institute of Technology’s toy design program, Stony Brook, and NYU’s Game Center. As one student wrote, “My professor pushed me and challenged me to dig deeper and do better and create more until I was satisfied with what I made.”
When asked “How might CCNY offerings (now or in the future) speak to students' interest in gaming to help them pursue their personal, academic, and career goals?” students provided 80 suggestions. The top category (41%) referred to academics, whether through a new major (8) or new individual courses (25). And many of the course requests were multidisciplinary; as one student wrote, “An elective class about game play or development would be a great interdisciplinary way to apply arts and design, logic and strategy, marketing and branding, and/or computer science.”

The second most common request was in the informal play space (32%). These requests made the case for how both social gaming and eSports can be a way for students to interact within a CCNY community built around gaming. “Gaming clubs may help connect people of similar interests/majors,” wrote one student, “and may help them discover new passions or strengthen old ones.” To support these activities, and specifically eSports, many respondents expressed a need for CCNY to provide better infrastructure, such as gaming stations.

The third most common request was CCNY making connections between students and the gaming industry (15%), through job fairs, internships, and guest lectures.

Until then, in the absence of more robust offerings, one student spoke for many when she shared, “YouTube will have to be my teacher in the meantime.”
Recommendations for preparing students for CCNY

At the high school level, teachers have a crucial role to play for building a pathway for students to college based on interests inspired through gaming. But the value of gaming is not universally appreciated within high schools, nor centralized within any one discipline.

Therefore, CCNY should help develop nodes within local schools that support that appreciation, focusing on their informal after school spaces and the staff that support them. CCNY should enhance or launch these programs, in part, by providing vetted and trained CCNY students in a mentorship capacity, game-related events at the University, a Discord channel across all programs, and resources, curriculum support, outside experts, and PD for the high school faculty.
Recommendations for recruiting students to and retaining them at CCNY

At the college level, CCNY students paint a portrait of two separated but related needs:

- There is significant interest in the video game industry and CCNY struggles to meet those needs. Work with an outside consultant, like Nick Fortugno, to develop a Masters and Undergraduate gaming program that draws from across the CCNY’s many departments. If of strategic value, start with an interdisciplinary certificate program.

- At the same time, student interest in gaming is inspiring them academically in STEM but also in creative fields (design, writing, etc.), professional fields (medicine, law), and more. CCNY should work to make both the campus and academics more aware and welcoming of these interests and influences. At the same time, it should keep these interests in mind when developing recruitment campaigns for new students.
Considering CCNY student feedback on who helped them plan an academic pathway connected with interests generated through video games, CCNY should run and test a recruitment campaign through social media influencers focused on celebrity YouTubers and eSports players.

At the same time, CCNY should explore how it can support its faculty to identify student interests generated by video games to establish academic connections that can be pursued locally and increase student retention.

Finally, many students arrive at CCNY as a local transfer student or after completing a 2-year degree. If CCNY raises its visibility across the CUNY network as a school supporting youth interest in gaming this will support faculty across the city to direct potential transfers to the College.
Once at CCNY, along with academics, informal play is key, whether through casual gaming or a competitive, fully-supported eSports league. “City College can do a better job with implementing eSports,” shared one student who already competes professionally. “UC Irvine has a whole entire gaming arena where they actually recruit top level players from around the world and around the country.” CCNY should look deeper into these opportunities.

Those efforts should begin with the already established student-run eSports Club. These students already compete in organized teams. They are knowledgable about what CCNY is missing and hungry to help CCNY reach its potential as a center for eSports. Meet with the leaders of both the club and team captains to establish a working group. The group should be resourced with a faculty member and set the goal of proposing a plan to the college for both a gaming club and an eSports program within three months of the request.
CCNY students helped us to clarify a framework of how the University can understand the various and vast opportunities offered by student interest in video games.

Games as a pathway to a career in gaming:
CCNY can create courses and programs in game design and game-adjacent topics (writing for games, game trailers, the business of games, etc.) while connecting students with both the NYC game industry and ludologists (academics who study games).

Games as an academic resource:
Games can inspire an interest in STEM, be studied from the discipline of other departments (e.g. the Sociology of Pokemon Go players), inspire teaching pedagogy, and be used as an instructional aide.

Games as entertainment:
Games can be used to build a community among both students and faculty, through play sessions, speakers (YouTubers, eSports athletes), and eSport competitions.

Games to develop life skills:
There are many skills games develop that can be applied to help one achieve their academic and professional goals.
Recommendations for an exhibit on “The Science of Games”:

- Leverage educator comfort with school-based games within the exhibit.
- Leverage student awareness of school-based games to explore STEM topics.
- Demonstrate how topics like physics, math, and psychology inform game design.
- Use Kahoot as an instructional aid for teachers to use before and after a visit.
- Use Kahoot as a tour guide WITHIN the exhibit.
- Use the exhibit and exhibit-related resources to empower educators to make a case among their colleagues about the educational potential of video games.
Video games today have a tremendous impact on society, both culturally and economically. Good or bad?

- Video games bind people together and help create relationships and friendships.
- It provides people with jobs in the gaming industry.
- It’s one of the few interactive art forms.
- A powerful way to tell serious stories and handle topics that other mediums try to accomplish.
- Games are getting better and better at portraying the issues of the world.
- A good way to spend time and escape from reality.

Video games expose society to bad communities, stress, and losing social relationships.

The gaming community needs to be more progressive than they claim to be, and criticize what they play before they unconsciously consume propaganda.
Are there times people demonstrate expectations about what you want or don’t want to play? Yes.

Do these expectations ever prevent you from playing what you want, or how you want? Yes.

**GENDER**

**YES**

A lot of the times because I am a girl I get told I have to like super cutesy games or that I shouldn’t be playing fighting games. I love playing fighting and cutesy style games but when I say that out loud people (usually men) say I have to like one or the other. This definitely stops me from talking about the different games I play because I don’t want to draw attention to myself. Even then I feel like I have to play worse when I play fighting games because of this.

**YES**

Yes, people usually base me as the type to play light hearted girly games, but actually I like games that are open world or consider gore themes. I don’t really mind, I don’t play with other people and am alright with that.

**YES**

A lot of the time people either think you are the e-girl stereotype or they just either talk over you as if your not there :/ As a man, people often assume that I’ll gravitate towards more action packed games like Call of Duty... I find much more value in more artistic games...

**NO**

I think games also feed into the sexism because most of their characters are hourglass skinny and small which feeds into misogyny. People be roasting the girl, saying “you shouldn’t be on here. You should be in the kitchen.” It be messed up.
Are there times people demonstrate expectations about what you want or don’t want to play?

GENDER

YES

I think there are some assumptions that females don’t play video games and that we only focus on makeup and clothes. Which isn’t true. There are female gamers that spend their whole day playing video games and make a career out of it.

NO

No, I play what I want to play. Whether that’s a first person shooter game, an rpg, or horror game, etc.

Do these expectations ever prevent you from playing what you want, or how you want?

YES

I guess because I am a girl, people will assume that I won’t play violent games.

NO

No, I play games for myself to have fun.

I think actions speak louder than words. Anytime I experience sexism… I try to prove them wrong. I don’t even bother trying to argue… I’d rather just show them who I am rather than tell them, you know?

Do video games portray women poorly?

True for most 15%
True for some 85%
Not true
Not true
Unsure
<table>
<thead>
<tr>
<th>GENDER</th>
<th>YES</th>
<th>NO/YES</th>
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</thead>
<tbody>
<tr>
<td>Some of my female friends who play video games with me do get assumptions put upon them because of their voice. This is one of the reasons why my friends refrain from voice chat in certain games because they would get gross comments about their body and what they should do [comments such as &quot;get back into the kitchen&quot;].</td>
<td>They don't prevent me and my friends from playing but do prevent my friends from speaking in game.</td>
<td>Sometimes a family member will joke about the &quot;Women can't play video games&quot;. It is sarcasm.</td>
</tr>
</tbody>
</table>

**Executive Summary**

<table>
<thead>
<tr>
<th>Findings</th>
<th>Games &amp; Me</th>
<th>Games &amp; We</th>
<th>My Future &amp; Games</th>
<th>A Gaming Exhibit</th>
<th>Appendix</th>
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<tr>
<td>Recommendations</td>
<td>Social Impact</td>
<td>The Fight for Inclusion</td>
<td>Gaming in School</td>
<td>School Dreams</td>
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**Are there times people demonstrate expectations about what you want or don't want to play?**

**Do these expectations ever prevent you from playing what you want, or how you want?**

---

Not gonna lie - I be bystand ing sometimes when stuff like that happens and I always think later on "man I should've said something"

The developers [of Apex] Legends [say] Most of our characters are LGBTQ, yada, yada, yada. And then the people who play the game are like homophobic and transphobic. So it's just like a disconnect from the community and what developers kind of want to do.
<table>
<thead>
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<th>ETHNICITY</th>
<th>Y</th>
<th>N</th>
</tr>
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<tbody>
<tr>
<td>When BLM was really popular during the summer, people became more openly racist, so when I tried to defend BLM and black people as a whole in voice chats of various game like Call of Duty or Apex Legends, people would reply back by saying the n-slur (I’m black btw)</td>
<td>Yes. Some expect me to play gun games, or basketball games</td>
<td>No. I play what I want. I don’t care what other people think about me.</td>
</tr>
<tr>
<td>If I would ever get called n-slur or f-slur I would just leave the game and que for another game because I know that I can’t do much besides report, but I still feel bad and just avoid that game for a little bit even if I enjoy playing.</td>
<td>Yes. Some expect me to play gun games, or basketball games</td>
<td>No. I play what I want. I don’t care what other people think about me.</td>
</tr>
<tr>
<td>Once they realize they got nothing to trash talk to you about... they start... saying some racist comments, I usually ignore it. It’s pretty annoying and pretty triggering.</td>
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<tr>
<td>Some of the usernames I’ve encountered are so blatantly racist that I had to put down the game.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>While playing multiplayer games, I got like, hate crimed a few times. People would just say the N word to me, yada, yada, yada… I have to take a break from the game because it’s just not good for my mental health.</td>
<td></td>
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</table>
Are there times people demonstrate expectations about what you want or don't want to play?

**YES**

There are times where people demonstrate expectations about what I want to play as in someone could tell me to play this game about a black protagonist fighting crime and doing nothing wrong just for the sole reason that I'm black and that I could.

**NO**

These types of expectations don't really prevent me from playing what I want because at the end of the day, I'm the one that's in control of my own life and what I think is appropriate for me to play.

Do video games portray minorities poorly?

- **73%** True for most
- **18%** True for some
- **9%** Not true
- **Unsure**

I have heard of people making stereotypical statements for what races play what... for League of Legends, people say only Asians play it... and that African Americans play a lot of 2K, because they like basketball.

I'll get on Call of Duty and I'll hear all these racial slurs being thrown around, against Latinos and people of color, like it's just a joke to them. This might be uninviting to different cultures or communities, especially if they're young.
According to the G.A., quiz style games that are fun, engaging, and content agnostic are by far the most common game used by high school educators (across all subjects). They are also often requested by students.
Among 49 different games experienced in class mentioned by students, half were Kahoot or the nearly identical Quizziz and the similar Quizlet. When depicted in their comic strips, these types of games often come across as an academic cure all.
In general, games are used as both a learning tool (as a way to develop new skills or learn new content) or as learning support to review that content (to reinforce the learning or as test prep).
Occasionally, single-subject games are used to teach content, like a typing game to learn typing, Oregon Trail to teach U.S. History, Coolmathgame to learn Math, or lab simulations to teach Chemistry.
It is rare for a non-quiz, content-agnostic game to be used, like Minecraft for Engineering or an escape room for Chemistry.  (Click here to see all of their comics)
All games, ordered alphabetically, listed by G.A. members as used in their classes.

<table>
<thead>
<tr>
<th>GAME</th>
<th>CLASS</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among Us</td>
<td>English</td>
<td>When work completed</td>
</tr>
<tr>
<td>Bingo Trivia</td>
<td>Global History</td>
<td>Test prep/review</td>
</tr>
<tr>
<td>Code.org</td>
<td>Engineering</td>
<td>Learning tool</td>
</tr>
<tr>
<td>Coolmathgames.com</td>
<td>Math</td>
<td>When work completed</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>When work completed</td>
</tr>
<tr>
<td>Escape Room</td>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>Games that teach definitions</td>
<td>English</td>
<td>Learning tool</td>
</tr>
<tr>
<td>Games used as examples</td>
<td>Social Science</td>
<td>Learning tool</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>Learning tool</td>
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<td></td>
<td>Chemistry</td>
<td>Learning tool</td>
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<td></td>
<td>Chemistry</td>
<td>Test prep/review</td>
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<tr>
<td></td>
<td>English</td>
<td>Learning tool</td>
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<td></td>
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<td>Learning tool</td>
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<tr>
<td></td>
<td>Geometry</td>
<td>Test prep/review</td>
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<td></td>
<td>Geometry</td>
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<td></td>
<td>Global History</td>
<td>Test prep/review</td>
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<td></td>
<td>Global History</td>
<td>Test prep/review</td>
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<td>Global History</td>
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<tr>
<td></td>
<td>Government</td>
<td>Test prep/review</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>Test prep/review</td>
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<tr>
<td></td>
<td>Health</td>
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<table>
<thead>
<tr>
<th>GAME</th>
<th>CLASS</th>
<th>ROLE</th>
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</thead>
<tbody>
<tr>
<td>Kahoot</td>
<td>Math</td>
<td>Learning tool</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>Spanish</td>
</tr>
<tr>
<td>Lab simulations</td>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>Math games</td>
<td>Math</td>
<td></td>
</tr>
<tr>
<td>Minecraft</td>
<td>Computer Science</td>
<td>address environmental problems</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>Learning tool</td>
</tr>
<tr>
<td>Online puzzles</td>
<td>Math</td>
<td></td>
</tr>
<tr>
<td>Oregon Trail</td>
<td>Global History</td>
<td>Learning tool</td>
</tr>
<tr>
<td>p5.js</td>
<td>Computer science</td>
<td>Code javascript games</td>
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<td>Quizizz</td>
<td>Calculus</td>
<td>Learning tool</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>Learning tool</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>Learning tool</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>Test prep/review</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>Learning tool</td>
</tr>
<tr>
<td>Quizlet</td>
<td>Chemistry</td>
<td>Test prep/review</td>
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<tr>
<td></td>
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<td>English</td>
<td>Learning tool</td>
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<td></td>
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<td>Learning tool</td>
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<td>Scibbl.io</td>
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<td>typing games</td>
<td>Math</td>
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<td>Computer Applications</td>
<td>Learning tool</td>
</tr>
<tr>
<td>vocabulary.com</td>
<td>English</td>
<td>Learning tool</td>
</tr>
</tbody>
</table>
Among CCNY students whose academic trajectory were influenced by video games (N=59), the majority (63%) named at least one type of person or institution who helped them to make that connection.
When asked how youth would like to see more games in high school classes, the G.A. still like quizzes but focused more on subject-specific games. For example, games that teach specific subjects (like Shakespeare, global politics, or rhythms).
They also want to see games used as subject matter to elucidate academic content (how physics, math and chemistry are used to design games, the psychological effect of game music, and how games impact society).
The types of games the G.A. would like to see, in what class, and for what reason:

<table>
<thead>
<tr>
<th>CLASS</th>
<th>GAME</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>Play games in Chinese</td>
<td>to help us learn Chinese at regular talking speed</td>
</tr>
<tr>
<td>Computer Applications</td>
<td>Kahoot</td>
<td>to make learning about computers more interesting</td>
</tr>
<tr>
<td>English</td>
<td>Games about Shakespeare</td>
<td>I wish there was more games about Shakespeare aha</td>
</tr>
<tr>
<td></td>
<td>Games that make reading fun</td>
<td>Help those for whom reading is hard</td>
</tr>
<tr>
<td></td>
<td>Kahoot</td>
<td>to memorize rhetorical devices with examples.</td>
</tr>
<tr>
<td></td>
<td>Game narratives</td>
<td>to learn how video games use those literary devices</td>
</tr>
<tr>
<td>History</td>
<td>Games with historical settings</td>
<td>A game that helps us to see what life was like back then</td>
</tr>
<tr>
<td>Modern Latin America</td>
<td>Games that teach global politics</td>
<td>To understand interactions between countries</td>
</tr>
<tr>
<td>Music in Context</td>
<td>Game music as subject matter</td>
<td>The psychological affect of games in music</td>
</tr>
<tr>
<td></td>
<td>The psychological affect of games in music</td>
<td>To understand how it affects them while playing</td>
</tr>
<tr>
<td>Music theory</td>
<td>rhythm games</td>
<td>to help us learn rhythms</td>
</tr>
<tr>
<td>Physics</td>
<td>Highlighting how physics is used in games</td>
<td>Connect content with games</td>
</tr>
<tr>
<td>Social science</td>
<td>Games with social impact</td>
<td>Connect content with games</td>
</tr>
<tr>
<td>Sociology</td>
<td>How games impact society</td>
<td>to see more of how games play a part in societal development</td>
</tr>
<tr>
<td>Spanish</td>
<td>Play games in Spanish</td>
<td>to help with memorization</td>
</tr>
<tr>
<td>Visual Art</td>
<td>Scibbl.io</td>
<td></td>
</tr>
</tbody>
</table>
When asked “How might CCNY offerings (now or in the future) speak to students' interest in gaming to help them pursue their personal, academic, and career goals?” current students provided 80 suggestions.

I'm gonna get three credits from my English class for doing a community observation of the Pokemon community. I'm pretty happy with that. That's a good way to blend our personal interest with our academic interests.

What I think the older generation doesn't understand is that slowly but surely eSports is becoming the new sports.
The CCNY eSports Club was asked a similar question: list the top three things related to gaming that CCNY students need from the university? Their responses included:

- Gaming club/gaming community
- Gaming equipment (internet, computers, gaming chairs, headsets, etc.)
- Video gaming spaces
- Having their interests treated with respect
- Gaming courses
- A competitive-level eSports team
- Gaming events
- Financial assistance
- Increased visibility of CCNY gaming opportunities
- Doritos and Mountain Dew
- Degree program
When the CCNY eSports Club was asked “If CCNY explores the creation of a program linking the College with area High School gaming clubs, would you like to see members of the CCNY eSports Club serving as a volunteer mentor to those students?” almost 3/4 said yes. (N=21)
A GAMING EXHIBIT

This section is based upon research with the ten hours spent with the G.A. and with the three geographic focus groups.

In the G.A. we asked the members to work in groups to design an exhibit about the power of video games. We provided context through a virtual field trip to an exhibit at the Harlem Gallery of Science’s web-based DUNK! The Science of Basketball, and a behind-the-scenes video on the making of a new gaming exhibit in an Australian museum.

The G.A. was then given one hour to split into groups to design their own exhibit on games. They were told they were curators of one room within a larger show entitled "How the power of games can empower your future!” They were provided a template they could modify of an exhibit, with elements they could use to represent their exhibit. Some used the additional pages to dig deeper into each station within their exhibit.

With limited time most left stations undefined, yet their rapid ideating demonstrated a wide range of thinking about what they might look for in an exhibit about the power and impact of video games.
The titles chosen for their exhibits can be grouped into three types of exhibit topics:

**Using games to address a game-adjacent topic**
- Gaming in Education - The Learn-o-phone
- Video Games in Different Fields: Psychology, Computer Science, and Music
- Ocean-based games
- Game Memories

**Games as product**
- The History of Video Games
- Gaming and Chilling
- The Big Game Room

**Game design as subject matter**
- Foundation of Game Making
- Player's Choice
- Tactical Shooters
Recommendations for an exhibit on “The Science of Games”:  
The exhibit concepts tell us what THEY want to know about video games (whether or not the exhibit plans to meet those needs). Teens are fascinated by games as designed objects, with their own technological history. They are interested in game design, not just the act of doing it but understanding different game mechanics (like tactical shooters) and core game design elements (like player choices). And they want a safe place to play games and watch others play.

If not the focus of the exhibit, these interests can be addressed through enhancements, to attract youth to the HGS and help spread the word.

For example:
  - Launch an exhibit-related, always-on direct-to-youth Discord channel.
  - Offer drop-in after school game design workshops.
  - Host meet & greets with gaming professionals and gaming celebrities (e.g. YouTubers, designers)
  - Host eSports events, or more informal gaming championships.
The youth occasionally explored different ways visitors might interact with the exhibit, beyond just copy, photos and videos.

- Consider how emerging media like VR and common tech like their smartphones can create rich ways for visitors to engage with the exhibit, the content and each other.

- One design described a station which supports a teacher to engage a class in a Kahoot like game - consider this model, which can work for a family as well.

- Consider designing digital games to be played within the exhibit as a vehicle for supporting engagement with the exhibit content (e.g. if the topic is about the consequences of decisions, have players make decisions within a game).

- Use technology to make the exhibit unified though a digital guide that personalizes and gamifies the experience.
What The G.A. did not include was also instructive.

At the end of the G.A. the youth reflected on their time in the program. One said The G.A. was a “comfortable space to talk about not only games but their values in our communities.” Another wrote “I feel like we have all came out of this class becoming philosophers”. An exhibit on gaming can provide such a space, even if the teens were unable to translate that into their own exhibit decisions.

When designing the exhibit, consider the following questions:

- How can an exhibit help visitors reflect on the role of games in their lives?
- How can an exhibit help visitors reflect on the role of games within their community?
- Can an exhibit address socio-emotional learning skills by addressing how visitors experience non-game content - like politics and sexism - bleeding into game spaces?
- How can games empower visitors’ learning, both within and outside their classrooms?
- Where in the exhibit can youth voice their opinions about any of the above topics?
Some addition recommendations:

- Speak to nostalgia for games and the deep emotions they generate.
- Consider exploring an educational topic across a series of games.
- Give visitors a chance to reflect on what they know or see: e.g. how games are used for learning, how STEM fields inform the design of games they play, the state of gender and ethnic representation (in both games and gaming communities).
- Draw from engaging Gaming Advisory activities, both for use pre- & post- in the classroom and within the exhibit.
- Build a youth advisory to consult monthly on the exhibit, validate concepts, review designs, and playtest prototypes.
To prime the G.A. to think about possible topics for their exhibit, we asked them what lesson they learned from the G.A. they would like to teach to others. The follow is from the text chat that followed:

- There are many layers that revolve around games / not just playing
- Games are one of the best ways to learn and apply varieties of things surrounding our daily lives.
- We should try to get teachers to try to incorporate gaming into the classrooms more
- Games can be used in schools to help students build connections with the content they’re learning but also make class more interesting over all
- Games are essentially what you make of them. It is up to you to take lessons or skills from them to apply to real life or really any circumstance
- I would like to teach my peers that games are an art form
- I would want to teach people how the privileges outside of gaming can affect people’s experience within the gaming community, whether that be playing games or making them
- I would definitely like to remove the stigma in education that gaming is a useless distraction, when it can be useful in some cases
- I would want people to accept gaming as a form of expression just as much as art

What follows are a few examples of their game exhibit designs. (See all here)
Gaming Exhibit Designs

Gaming in Education

exit

Entry

Curator: Jaden

Shows an interactive quiz using “learn-o-phones”, to help engagement during a simulated class, with points at the end tallying up the score.

Introduction/main hub. Gives overview of gaming in education, with it acting as the hub of the room, each exhibit branching from it. Receives interactive “learn-o-phones” guided with an AI to help you go through the exhibit and participate in activities.

Using the learn-o-phones, guests go on a virtual field trip, taking pictures of different sights at the location, and posting facts on a school only social page, gaining more points with the accuracy of the info.

In this exhibit, the learn-o-phones show their use in a library setting, allowing users to check out books, and annotate on device for book reports.

An AI in the learn-o-phones named “teach”, guides guests through the history of education in the world, and the tools used to educate. till we reach modern day, including gaming tools such as math blaster, jumpstart, prodigy, and Minecraft education, and are even allowed to play demos of these games.
**Executive Summary**

**Games & Me**

**Games & We**

**My Future & Games**

**A Gaming Exhibit**

**Appendix**

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**Findings**

**Recommendations**

**Gaming Exhibit Designs**

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**THE BIG GAME ROOM**

*Curator: Jaylen*
What visitors do at this location is play original versions of games, and then compare it to a re-imagining of it or how a certain genre changes over time.

People will learn about the timeline of video games and there physical changes throughout the years.

This location is going to be made up of a gallery with different pictures that will show the development and changes in video games from then to now.

MEMORY

Curators: Ezen & Victoria
In the three focus groups with high school students, we asked them what they would expect to see in an exhibit called “The Science of Games”. They shared with enthusiasm.

- Old gaming consoles.
- I would expect to see computers, TVs and technologies.
- I think we’ll also see like a timeline of like, from 1980s to like now, timelines of the games that came out or made innovations.
- I’d expected to see actual games that you could play by yourself. But ones from a long time ago.
- Have also like puzzles and games made out of wood.
- Show how the graphics have improved.
- You can like search up behind the scenes of how they make certain games.
- How motion-capture is used to make video games.
- Physics in games
- The neurological effects of games on your brain.
- Ninja, “one of the most successful streamers in the whole world who made revolutionary changes”
- Behind-the-scene history on what it took for certain games to get made
- Live competitive gaming sessions they could watch
- Real life board games you can play
- How every video game genre works
Appendix
# Video Games Played in the Last Year

<table>
<thead>
<tr>
<th>Game</th>
<th>#</th>
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</thead>
<tbody>
<tr>
<td>Among Us</td>
<td>43</td>
<td>84.31%</td>
</tr>
<tr>
<td>Minecraft</td>
<td>33</td>
<td>64.71%</td>
</tr>
<tr>
<td>Fortnite</td>
<td>21</td>
<td>41.18%</td>
</tr>
<tr>
<td>Mario Kart</td>
<td>21</td>
<td>41.18%</td>
</tr>
<tr>
<td>Super Smash Bros.</td>
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<td>41.18%</td>
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<tr>
<td>Call of Duty</td>
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<tr>
<td>Roblox</td>
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<tr>
<td>Animal Crossing</td>
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<tr>
<td>Genshin Impact</td>
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<tr>
<td>Pokemon</td>
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</tr>
<tr>
<td>Apex Legends</td>
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<td>33.33%</td>
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<tr>
<td>Candy Crush</td>
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</tr>
<tr>
<td>Grand Theft Auto</td>
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<td>29.41%</td>
</tr>
<tr>
<td>Fall Guys</td>
<td>14</td>
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</tr>
<tr>
<td>Rocket League</td>
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<td>27.45%</td>
</tr>
<tr>
<td>Friday Night Funkin</td>
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<tr>
<td>Valorant</td>
<td>13</td>
<td>25.49%</td>
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<tr>
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<tr>
<td>Kirby</td>
<td>11</td>
<td>21.57%</td>
</tr>
<tr>
<td>Legend of Zelda</td>
<td>11</td>
<td>21.57%</td>
</tr>
<tr>
<td>Counter-Strike: Global Offensive</td>
<td>9</td>
<td>17.65%</td>
</tr>
<tr>
<td>Overwatch</td>
<td>9</td>
<td>17.65%</td>
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<thead>
<tr>
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<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow Six Siege</td>
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<td>17.65%</td>
</tr>
<tr>
<td>Warframe</td>
<td>9</td>
<td>17.65%</td>
</tr>
<tr>
<td>Batman Arkham Knight</td>
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<td>15.69%</td>
</tr>
<tr>
<td>Cyberpunk</td>
<td>8</td>
<td>15.69%</td>
</tr>
<tr>
<td>Dragon Ball Xenoverse 2</td>
<td>8</td>
<td>15.69%</td>
</tr>
<tr>
<td>Final Fantasy</td>
<td>8</td>
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</tr>
<tr>
<td>NBA 2K</td>
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<td>15.69%</td>
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<tr>
<td>Super Mario Odyssey</td>
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<td>Untitled Goose Game</td>
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<td>Dauntless</td>
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<td>Naruto storm 4</td>
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<tr>
<td>PAC-MAN</td>
<td>6</td>
<td>11.76%</td>
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<tr>
<td>Resident Evil 7</td>
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<td>11.76%</td>
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<td>Super Mario DS</td>
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<td>9.80%</td>
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<tr>
<td>Kingdom Hearts II</td>
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<tr>
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<tr>
<td>Mirror’s edge</td>
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<td>3.92%</td>
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<tr>
<td>Monster Hunter World</td>
<td>2</td>
<td>3.92%</td>
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<td>My Hero: One’s Justice 2</td>
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<td>3.92%</td>
</tr>
<tr>
<td>Phantasy Star Online</td>
<td>2</td>
<td>3.92%</td>
</tr>
<tr>
<td>Fusionfall</td>
<td>1</td>
<td>1.96%</td>
</tr>
<tr>
<td>Man-eater</td>
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<td>1.96%</td>
</tr>
<tr>
<td>Sekiro</td>
<td>1</td>
<td>1.96%</td>
</tr>
</tbody>
</table>

These results combine responses from members of The GA, their peers in the high school SIA programs and host schools (N=51).
Do you participate in or regularly consume any activities related to your video gaming interests (beyond playing)?

Yes: 20 of 22 (91%)

What sorts of video game-related activities outside of playing do you participate in?

- Let's Play
- Live streams
- Gameplays
- Game designing
- Game news

While members of The G.A. are highly active in video game ecosystems they rarely if ever are involved in tabletop ecosystem activities.
What sorts of tabletop game-related activities outside of playing do you participate in?

- I enjoy watching other people play online
- Reading books about the game
- D&D Let’s Play videos
- See what new board games are coming out
- Chess played on social media
- Watching people play
- How to play tips
- Make a paper prototype
- Chess on Twitch
- Watch people play in Tabletop Simulator
- Play in Chess Tournament

Most members of The G.A. are not engaged in activities related to the tabletop games they play.

Do you participate in or regularly consume any activities related to your tabletop interests (beyond playing)?

Yes: 5 of 22 (23%)
What teens say when playing games and think caregivers are not listening:

- At times my teammates might do something ignorant, I might do something I regret or I lose a game.
- Sometimes when a teammate misplays, for something negative.
- If I see a teammate make an impressive play or something similar.
What teens say when playing games and think caregivers are not listening

- Let's gooooooo!
- Oooocooooooohhhhhhh!
- Something hype happened

- How did I die to that attack? I thought I blocked it.
- What is their weak point?
- The game might get this reaction from me because I become so invested in the game that I begin to complain to myself why I haven't beaten the boss sooner.

- Crap! Frick!
- How the HECK do I do this?
- OMG that scared me!
- Playing the game Little Nightmares.
What teens say when playing games and think caregivers are not listening
What teens say when playing games and think caregivers are not listening
What teens say when playing games and think caregivers are not listening

- I hate this game!
- Why would anyone want to play something like this?
- If a challenge is making me repetitively lose I get frustrated with myself. Usually at that point I'll just quit the game so I don't have to think about it anymore.

- Why don't you love me? I gave you 3 apples. I just want a photo already.
- With different games like Animal Crossing I might start talking about the villagers.

- Bang this game is awesome! Why is this game so freaking hard?!!
- Due to how difficult a level is or how amazing the art style is. Or the way the story telling enables the user to feel connected to the obstacles within the game.
What teens say when playing games and think caregivers are not listening

- I am passionate about the games that I play, so when I am not playing as well as I know I can, I feel like I am letting myself and my teammates down.

- Usually elicited from something surprising, like about a story or doing something unfavorable (dying, surprisingly attacked).

- Look at the character trailer, the way it transitions characters into their names in text match the music so well. That is so cool.

- The female characters in this game is so sexualized.

- I’ve noticed that over-sexualization of female characters is a constant recurrence in a lot of games. I want to get rid of stereotypes within games by starting with how they are designed around characters. We can change online game culture and further restore this economic force.
What teens say when playing games and think caregivers are not listening

Well, crud! C’mon! Oh- you just died. You’re useless to the party.

When I’m gaming, I’m usually in the zone, so I like to complete the objective without fail.

Oh shoot

Ugh, I hate this player

I may be mad at a player or myself for committing a mistake. Also, I may be very close to a win and end up losing.

My opponent is a stupid try-hard.

If I’m losing.
What teens say when playing games and think caregivers are not listening

1. **Executive Summary**
   - **Findings**
   - **Recommendations**

2. **Games & Me**
   - **Games Played**

3. **Games & We**
   - **Sounds They Make**

4. **My Future & Games**
   - **Meta-Gaming**
   - **Game-driven Narratives**

5. **A Gaming Exhibit**

6. **Appendix**

---

**Illustrations:**
- Text: "[Insert inappropriate joke here...]
  
  *Usually when I'm playing chill games like Minecraft I can just vibe on it and start cracking jokes. Everyone has their boundaries so we won't say some messed up stuff.*

- Text: "Lots of yelling sounds"
  
  *If it's a competitive game I'd usually get mad. I hate games that involve teamwork because a lot of people try to do their own thing. Those teammates are common and they trigger me a lot.*

- Text: "Let's GO!
  Oh, My, GOD!
  THIS GAME IS CRAZY!"
  
  *Either I did something that is very beneficial, or the game did not go the way I wanted.*
All of the Mechanic Ecosystems from the Gaming Advisory

Deadline

1. Name the game: Put the name of one specific game that you play in the central circle.

2. Fill in the gap in mechanics: In one sentence, describe what the player does to advance within the game.
   e.g. a scale-like side-scroller

3. Think of something you do related to that game that is NOT that game (e.g. watch videos, make art, read reviews, etc.). Then pick or add a circle and link:
   a. what: what is the thing you are doing related to the game? e.g. Seeking advice on Discord, watch videos
   b. where: where you are physically and digitally when doing that activity, and any institutions or communication networks involved e.g. Home, Youtube, B.A.
   c. who: who doing that activity connects you with, whether directly or through something they must be related to the game and its ecosystem e.g. no one
   d. goal: what you are trying to achieve doing that activity e.g. have fun, learn, make, buy, etc.
   e. ratio: in one word, preferably a noun, the thing you are when doing that activity e.g. Player, Creator, Consumer, etc.

4. Tell your story: Is there a common theme that emerges when you look across the social roles enabled by this game? What story does it tell about you? Write that in the box in the lower right.

5. Name yourself: Put your name in the lower right-hand corner.

Social Mechanic Ecosystem Template

Jada Williams
# Executive Summary

## Games & Me

**Learner**
- WHAT: Learn how to get a better speedrun
- WHERE: Youtube, Twitch
- WHO: Dream
- GOAL: To try to beat the game faster

**Creator**
- WHAT: Creating my own little maps (Hardcore, mineshaft creative, survival)
- WHERE: In game
- WHO: Me
- GOAL: To have some fun in the game

**Student**
- WHAT: Learning tips on how to get the best equipment skins
- WHERE: Youtube, Modpacks
- WHO: People who have played the game know what the best options are
- GOAL: To get even better, and to have a slight advantage

## My Future & Games

**Game Mechanic:**
- (Game) is a Multiplayer game

## A Gaming Exhibit

**Me & My Game**
- As a player of [game], I get to be ThrIS in the world: Am Innovator, a Player, a Learner, and a Student

---

**Social Mechanic Ecosystem Template**

Lee
Executive Summary

Games & Me

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My Future & Games

A Gaming Exhibit

Appendix

---

**Animal Crossing**

**WHAT**: Creating a costume design
WHERE: Able Sisters' (Clothing store)
WHO: the person who created the design
GOAL: Create a new design

**Game Mechanic**:
Animal Crossing is a social simulation game that follows the player on their journey to better their island and make friends.

**Me & My Game**
As a player of Animal Crossing, I get to be THIS in the world: Someone who consumes information around them to later implement it in any function.

---

**Student**

WHAT: Learn from Animal Crossing tutorials
WHERE: Youtube
WHO: Youtuber
GOAL: Make a good level

**Learning Observer**

WHAT: Following Instagram accounts to see island designs
WHERE: Phone
WHO: Other players
GOAL: Improve your island

---

**Artist**

WHAT: Using Nook miles
WHERE: Your island
WHO: the person who is the owner of the island
GOAL: Find villagers

---

**Social Mechanic Ecosystem Template**

Ceyda
**Executive Summary**

*Games & Me*

*Games & We*

*My Future & Games*

*A Gaming Exhibit*

---

**Social Mechanic Ecosystem Template**

**Victoria**

---

**Game Mechanic:**

Mario Smash Bros is a multiplayer game that I get inspiration from to make my own games. I guess that makes me a ponderer.

**Me & My Game**

As a player of Mario Smash Bros, I get to be THIS in the world: I can choose different characters that I want to be. I usually choose Zellos because I like her powers the best and find her as a character that I have a better chance of winning with.

---

**WHAT: Watching hacks**

WHERE: On youtube

WHO: Me

GOAL: To get better at the game

**WHAT: Talk to others about the game**

WHERE: In person or On the phone

WHO: Me and the other person

GOAL: To get there opinion on certain aspects of the game

**WHAT: Watch movies that relate to the game**

WHERE: Wherever they stream the game movie version

WHO: Me

GOAL: To compare it to the game and see how accurate it is to the game

**WHAT: Research pros and cons about each character in the game**

WHERE: Google

WHO: Me

GOAL: To get better at the game

**WHAT: Couldn't think of anything else to write :(

WHERE: n/a

WHO: n/a

GOAL: n/a
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Social Mechanic Ecosystem Template

Nicole
Executive Summary

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A Gaming Exhibit

Appendix

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**Animal Crossing**

**WHAT:** Watching and seeing other players islands
**WHERE:** Can be on youtube or through twitch streams (also insta since people share pic of islands)
**WHO:** YouTubers
**GOAL:** Get inspiration for my island over all. Many places on my island feel empty so I like to see what other people have made.

**Game Mechanic:**

**WHAT:** Create new pattern/designs to be used in game
**WHERE:** Usually found on insta/pinterest
**WHO:**
**GOAL:** I like to make my own custom designs and help my friends use some of my designs on their islands. I also like to borrow custom designs from other players to make up for items that can't be found in game

**Me & My Game**

**WHAT:** Watch YouTubers play through certain events so I can get a better idea on how to play through an event
**WHERE:** Youtube
**WHO:** Crossing channel
**GOAL:** Learn how certain events are played and figure out how they actually work. I want to make sure I play the game right later on.

**WHAT:** Join animal crossing club and talk about the game or play it with others
**WHERE:** In school through google meet
**WHO:**
**GOAL:** Interact with others who love the game as well as talk about upcoming events

---

*Social Mechanic Ecosystem Template*

Asiamae
Executive Summary

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Social Mechanic Ecosystem Template

Daniel

---

Game Mechanic:

(Game) is a...

---

Role: WHAT: WHERE: WHO: GOAL:

Student: WHAT: WHERE: WHO: Myself GOAL:

Roblox: WHAT: WHERE: WHO: GOAL:

To enjoy the game with others

To be able to buy my clothes and options for my avatar, while learning how to make my own game within Roblox that people could enjoy

Daniel

As a player or gamer I got to be:

THIS, IN THE WAY:

I'm able to talk to more people and have mindless fun, that can lead to new creative projects like games, clothes, avatars, etc.
**Executive Summary**

**Games & Me**
- **WHAT:** Watching content creators on Twitch or having a watch party with my friend on esports
- **WHERE:** Home, YouTube, Twitch, Discord
- **WHO:** Friends, people in the community, streamers
- **GOAL:** Have fun

**My Future & Games**
- **WHAT:** Getting taught by friends to learn more
- **WHERE:** Home, Discord, Twitch, YouTube
- **WHO:** Friends, streamers
- **GOAL:** Learn the game to play better

**A Gaming Exhibit**
- **WHAT:** Teaching people
- **WHERE:** Discord
- **WHO:** Friends, newcomers
- **GOAL:** Teach people the basics of the game

**Game Mechanic:**
- **Valo**
  - **WHAT:** Valorant is an online first-person shooter.

**Me & My Game**
- **As a player of Valorant, I get to be a watcher, student, and sometimes teacher.**
WHAT: Speedruns, Tips and Tricks
Analysis
WHERE: At my house
WHO: Youtube/Twitch
GOAL: To get a better understanding of the game

Role

WHAT:
WHERE:
WHO:
GOAL:

Kingdom Hearts: Chain of Memories

DONE

Role

WHAT:
WHERE:
WHO:
GOAL:

Ponderer

WHAT:
WHERE:
WHO:
GOAL:

WHAT: Story/World design
WHERE: a neighbor’s bush that grew to the other side
WHO:
GOAL: to create a game with the concept of peoples past experiences

Game Mechanic:
[Kingdom Hearts Chain of Memories is an action rpg where you have to use cards with a specified number to defeat enemies and get out of Castle Oblivion.

Me & My Game

As a player of Chain of Memories, I get to be THIS in the world. Someone who wants to help build relationships based off of past experiences, and how I can use other’s experiences to help myself.

Social Mechanic Ecosystem Template

Ezen
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---

**Executive Summary**

**Games & Me**

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**My Future & Games**

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---

**Social Mechanic Ecosystem Template**

**Builder**

WHAT: Learning how to build redstone builds.  
WHERE: YouTube  
WHO: Minecraft builders or players on YouTube  
GOAL: To create useful redstone builds that make playing the easier or more efficient.

**Learner**

WHAT: Just mining and getting ores to improve my tools and armor in Minecraft.  
WHERE: YouTube tutorials can be helpful on trying to find specific ores or learning how to craft specific items.  
WHO: YouTube or Minecraft forum pages.  
GOAL: To improve my gameplay and survive for longer.

**Minecraft**

**Creator/Artist**

WHAT: Making friends with other Minecraft players.  
WHERE: On minecraft servers or discord groups.  
WHO: Other players that also love to play and talk about Minecraft.  
GOAL: To have fun and make more friends with people with similar interests.

**Social**

**Game Mechanic**

In Minecraft Survival, the main goal is to survive, build, explore, and have fun but also an optional goal in Survival is to defeat the Ender Dragon and the Wither.

**Me & My Game**

As a player of Minecraft I get to be THIS in the world. A artist/creator that allows me to show my creative side to other players. Other players that can also draw inspiration from my builds.

---

Amy
Executive Summary

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Appendix

In Minecraft, Creative mode you have access to all items and are not able to die.

What: create new textures and themes
Where: Minecraft, dermat i act, etc
Goal: To improve gamer experience
Who: a fellow player

Artist/Moderator

Friend

In game mechanics:

What: watch tutorials
Where: online, forums
Goals: to become my expert and to learn

Content Creators

Minecraft

Learner

What: spend time with the ones I care for
Where: at home
Who: me and things or best friends
Goals: to spend time together and what they create to make memories

Me & my game:

As a player in Minecraft, I get to explore new worlds and realms. And not feel constrained to one sort of agenda. I get to fight and do my heart's desires.
All of the Gaming Community Maps from the Gaming Advisory
In parks, I would like to see more video games. I think tabletop games are common in this location due to their convenience in an outdoor environment; therefore, I would make video games more friendly towards outside and remnants.

**Ceyda's Map**

**KEY:**
- Locations where I see games
- Where I would like to see change

- Park: Old people playing chess
- Field: Teenagers playing soccer
- School: Students playing Minecraft
- Cafe: Playing Genshin Impact
- Gate: Playing Animal Crossing
- Bus: College student playing Animal Crossing
- Apartment: Child eating and playing Mario Kart
- McDonald's
- Sugar Factory
- Central Rock Gym
- 1 West End
- Fordham University Lincoln Center
- Dylan Kirk
- 66 St. Lincoln Center
- ZARA
- 72 St.
Nicole

- Students playing games on the library computers
- Students playing Mario Kart on a switch in the school cafeteria
- People on their phone waiting for the train
- Kids playing soccer
- Teenagers playing basketball in a court
- Throwing frisbees or volleyball on the beach
- Where I see games
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Appendix
Angel

Start

Saw person playing mobile game through window of Anime Castle

person playing pokemon Go as they cross the street (not a very good idea)

saw people playing Yu-Gi-Oh as I passed by the window of Card Quest

saw person playing mobile game while waiting at Union Station

destination
Train station

People pull out their phones to play mobile games.

People go home to play casual games.

School: People practice for a local esports tournament.

Gamers store: ontvang nieuwe games.

People play games together.

Start
All of the the Gaming Advisory comic strips about gaming in schools
Man, English class was so boring today. I wish we would play Kahoot, or something like that, for review or something.

Yea, just like in Physics, or chemistry from last year, maybe you should ask the teacher about it again for sure!

I also feel like it would help me actually pass an English test, since I have yet to do so.

Hey, Miss, I want to ask you something, can we use games like Kahoot to study in class. I feel like that would be more engaging for the students.

Sure! I think that's a great idea.

ON WOW!!! I actually passed an English test, I bet it was all due to that Kahoot we did yesterday in class.
whenever we had a break, we were finished with work, we played coolmathgames like papas games and that one running game.

we are all playing on coolmathgames

I wish that we had more teamwork related games all throughout school. For example, in STEM class, we had many group projects that could have explored creating games.

It is time for a brain break (which means we are playing some type of digital game for a minute!)

math class
Executive Summary

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Appendix

This is a science class, you guys!

It's best to talk about Boon some other time, class is about to start.

But this game is really awesome! We should totally play it after school.

Welcome to anime club students, please make any suggestions on games and movies to watch.

I hope she announces the new animal crossing game.

Welcome to anime club students, please make any suggestions on games and movies to watch.

Wow I didn't know she liked dragons. Maybe I should tell her about the GTA dragon mod.

Did you hear about the new ark update supposedly there are dragons...

Wait...what dragons OMG!
Man, this class is boring. I wish it had more interesting things going on!

Yeah, I'm falling asleep over here.

Yo, I've got an idea! Let's ask the teacher if we could play some games!

Ok, I'm down. Not sure if it'll work, though.

Me neither! I think that I understand a bit more about theater now!

I actually can't believe that worked!
On the bus or subway going to school, I can play games that don't require internet as usually there's no cellular or internet underground. It is one of the few moments I can play some games during the school day.

Computer lab is a great place to play video games with friends like halo and other shooters that you need a computer for.

In the classroom, we can play games such as snake or among us with friends. Also, we can hook up a device to the smart board and play.
Hello, people! Something I found interesting on my JamBoard is that most of my complicated or advanced classes did not have a role for games.

I agree, AP World History is boring and would be fun with games.

In my Computer Science class, it was interesting to see how we used games and programming to fix environmental issues.

It was interesting to see that in my chemistry class, we used Kahoot to better understand different concepts.
math and physics classes would be a great way to incorporate games into the curriculum. Teachers could easily use physics or trig examples in games but choose not to.

making rock paper scissors and song in class as projects was really fun since those were real life examples we could relate to.

playing games in advisory along with my teacher was really fun. It took away the stress of the school day.
Yep, I heard they added a new character. What do you think about the new update?

Did you hear about the new update?
I wish we did scribble.io in art class.

This isn't really game related. This is more movie related but I want to watch movies about the people we learn about.

I wish we could do something to make geometry more fun. Like every week we could have a math game day.
Society: When Teachers use games to engage students

Class because there is no game that teaches the lesson efficiently

Today we will be playing a hacket to learn about our fractions!!

YAY

THIS REALLY HELPS
In history class, we all played the Oregon Trail after learning about it.

On field trip days, when we got back to the school for lunch we would play games on our phones.

In grammar class, we would have a competition between students to see who remembers the most vocabulary.
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Wanna go play Mario Kart after class.

Alright, but prepare to lose.

This class is for global. It's an educational class, but we don't play games in it which is sad.
### Executive Summary

#### All of the the Gaming Advisory charts about gaming in schools

<table>
<thead>
<tr>
<th>CLASS</th>
<th>1 thing I learn</th>
<th>Roles played by games now</th>
<th>Roles I wish games would play</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>How to critically look at media</td>
<td>None</td>
<td>They could help us save time and have fun when we write a story.</td>
</tr>
<tr>
<td>Spanish</td>
<td>How to speak Spanish better</td>
<td>None</td>
<td>I have nothing really.</td>
</tr>
<tr>
<td>Band</td>
<td>Music theory</td>
<td>None</td>
<td>We can use rhythm games to help us remember rhythm patterns.</td>
</tr>
<tr>
<td>Lunch</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Global History</td>
<td>We learn about trade how that led to how we are now</td>
<td>None</td>
<td>I don't know how games would fit in with history.</td>
</tr>
</tbody>
</table>
Executive Summary

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A Gaming Exhibit

Appendix
CLASS | 1 thing I learn | Role played by games now | Role I wish games would play
--- | --- | --- | ---
English | How to cite evidence | | 
Spanish | Speaking other language | | 
Physical Education | How to get fit | | 

Evan
<table>
<thead>
<tr>
<th>CLASS</th>
<th>1 thing I learn</th>
<th>Role played by games now</th>
<th>Tanveer Sify</th>
<th>Role I wish games would play</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>How to cite evidence</td>
<td>We learn on a website that has an NPC exp system that lets the user unlock collectibles and unlock features. It's called Dasingo.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>Learning Spanish Terms</td>
<td>We bring all sorts of games, devices and food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>We learn how to eat</td>
<td>We play Bingo. Trivia in teams to practice for test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global History</td>
<td>We practice to prep for the exam through notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>We learn how to do basic math.</td>
<td>We play cool math games.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Role I wish games would play</td>
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<td></td>
</tr>
<tr>
<td>English</td>
<td>How to conjugate verbs</td>
<td>World in / adventure as fast as time</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>How to use HTML, Python</td>
<td>None</td>
<td>Memorization related games, quiet for example.</td>
<td></td>
</tr>
<tr>
<td>Engineering drawing</td>
<td>How to use HTML, Python</td>
<td>Microsoft / tutor / project / some on code.org</td>
<td>Testing out games --&gt; Analyze them as a class, kinda like SIA</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>How to multitask</td>
<td>Apps: games, sports, and math; restaurants + others.</td>
<td>Teamwork related games / Mario kart</td>
<td></td>
</tr>
<tr>
<td>Algebra 1</td>
<td>Math</td>
<td>Classroom games, used for whatever they think is work.</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Algebra 2</td>
<td>Math</td>
<td>Typing games</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Hydrocarbons</td>
<td>Escape room games, horror / survival / management / general</td>
<td>More games in general.</td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Lee</td>
<td>Role I wish games would play</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------</td>
<td>--------------------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>English</td>
<td>How to write FLE's</td>
<td>N/A</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Latin</td>
<td>How to speak Latin</td>
<td>N/A</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Art</td>
<td>Improve on sketching skills</td>
<td>N/A</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Lunch</td>
<td>EAT</td>
<td>N/A</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Global Studies</td>
<td>To robotic teachers do not believe in us</td>
<td>N/A</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Math</td>
<td>PEMDAS</td>
<td>Math games</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Knees up when jogging</td>
<td>Soccer, Physical Games</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>Biology</td>
<td>Cell, mRNA, tRNA, rRNA</td>
<td>Cell games (Not the D2T ones)</td>
<td></td>
<td>Contribute to learning</td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Role I wish games would play</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>APLANG</td>
<td>How rhetoric applies to writing</td>
<td>nothing</td>
<td>What we learned about new ideas and Fresh Energy devices</td>
<td></td>
</tr>
<tr>
<td>Advisory</td>
<td>How did the media shape my views towards politics?</td>
<td>play games like among us and not to pay attention</td>
<td>nothing</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>How the media effects us as people</td>
<td>always games are gain or media</td>
<td>and get more out of games that we normally</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>How gravity affects the movement of planets</td>
<td>nothing</td>
<td>what we can expect as long as physics are used in games</td>
<td></td>
</tr>
<tr>
<td>AP US History</td>
<td>The reason for capitalism and its place in the US</td>
<td>nothing</td>
<td>just think about anything that would work into the components</td>
<td></td>
</tr>
<tr>
<td>AP Comp Sci principles</td>
<td>Learn p5.js</td>
<td>made rps and doing in p5.js</td>
<td>we could look at even more games</td>
<td></td>
</tr>
<tr>
<td>Pre Calc</td>
<td>trig</td>
<td>nothing</td>
<td>make way for new games or even games as how high are they used</td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Role I wish games would play</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>English College</td>
<td>Able to explain complex algebraic concepts</td>
<td>Nothing</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>Calculus 1</td>
<td>Differentiation</td>
<td>Nothing</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>College Biology</td>
<td>We learn about cells and the functions they perform</td>
<td>Bio interactive tutorials</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>Modern Latin</td>
<td>Learning about art and the different layers</td>
<td>Nothing</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>America elective</td>
<td>Understanding the concept of building and restoration</td>
<td>Games on the switch and on the phone</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td></td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>Learn intricacies</td>
<td>We can then express chinese characters that appeal to genre</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>Music in Context</td>
<td>We can control different types of music</td>
<td>nothing</td>
<td>Make random inattentive</td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Ceyda</td>
<td>Role I would play with games</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
<td>--------------------------</td>
<td>-------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>English</td>
<td>How to cite evidence</td>
<td>We played a Kahoot game on our book</td>
<td>I want to make more games about Shakespeare</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>Learned how to conjugate in Spanish</td>
<td>We played a game on Quiz to learn some words</td>
<td>More games in Spanish</td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>Learned HTML and Python code</td>
<td>Watch Minecraft videos and teach programming skills</td>
<td>Computer game awards</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>Ate food</td>
<td>Nothing</td>
<td>Not sure</td>
<td></td>
</tr>
<tr>
<td>AP World History</td>
<td>Learned about the Industrial Revolution and Scientific Revolution</td>
<td>Nothing</td>
<td>More information on history</td>
<td></td>
</tr>
<tr>
<td>Algebra 2/ Trig</td>
<td>Unit Circle</td>
<td>Nothing</td>
<td>Nothing</td>
<td>More about the use of algebra in games</td>
</tr>
<tr>
<td>College Sociology</td>
<td>Human society</td>
<td>Nothing</td>
<td>Nothing</td>
<td>More about the sociology behind video games</td>
</tr>
<tr>
<td>Chemistry</td>
<td>MOLES</td>
<td>Kahoot to learn about cells and moles</td>
<td>More about the use of chemistry in games</td>
<td>More chemistry games</td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Amy</td>
<td>Role I wish games would play</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>English</td>
<td>learned some new vocabulary words</td>
<td>new ways games can help improve memory and help keep information organized</td>
<td>none</td>
<td>maybe have games that make reading more interesting</td>
</tr>
<tr>
<td>Geomerty</td>
<td>Learning new math formulas</td>
<td>we use Kahoot to help us learn how to remember math formulas</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Health</td>
<td>learning about what makes us healthy and how to stay healthy</td>
<td>we use Kahoot to approximately review for our test</td>
<td>help us stay healthier</td>
<td>help us remember what we need to study more often</td>
</tr>
<tr>
<td>Lunch</td>
<td>learned what balanced meals are and how to solve the puzzle</td>
<td>nutrition for health and wellbeing</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Global History</td>
<td>Learned about WWI and WWII</td>
<td>Use Kahoot and Resources for tests</td>
<td>help us remember what we need to study more often</td>
<td>help us remember what we need to study more often</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemical Formulas</td>
<td>used Kahoot to learn the periodic table and questions</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Physical Education</td>
<td>learned how to play different sports</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Done</td>
<td>Role played by games now.</td>
<td>Ivan</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------</td>
<td>------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>English</td>
<td>broadened my vocabulary</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>learn to use words and sentences in Spanish</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Visual Art</td>
<td>learned different art styles</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>improved my interactions with my dining room friends</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Global History</td>
<td>learned about historic events</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td>learned how to identify shapes/areas of objects in</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>improved my hand-eye coordination and strength</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>learned characters and sentence structures</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>1 thing I learn</td>
<td>Role played by games now</td>
<td>Julian</td>
<td>Role I wish games would play</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>--------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>English</td>
<td>Learning Boston Scientific Devices</td>
<td>N/A</td>
<td>John</td>
<td>Simulate Boston Scientific devices with game environments.</td>
</tr>
<tr>
<td>Math</td>
<td>Learn about logarithms</td>
<td>N/A</td>
<td>John</td>
<td>Logarithmic calculations in games.</td>
</tr>
<tr>
<td>Music</td>
<td>Learn how to read music</td>
<td>N/A</td>
<td>John</td>
<td>Interactive music learning experiences.</td>
</tr>
</tbody>
</table>
All of the the Gaming Advisory game exhibit concepts

Switch and Mario Maker 2

To draw the attention and bring the topic closer the Game "Mario Maker 2" will be on display to the basic concept and fundamentals of level design. A unique perspective on how games are made.

Learning Objectives:
People will get to make their own Mario levels and play around have the design experience themselves.

Mediums and Materials: Wii U, Nintendo Switch, A Big Display or Multiple Monitors for multiple users

Interactive and Mechanics: Plan and Make their own Functional Level

Foundation of Game Making

Curators: Tanveer, Jada
Executive Summary

What visitors do at this location is play original versions of games, and then compare it to a re-imagining of it or how a certain genre changes over time.

This location is going to be made up of a gallery with different pictures that will show the development and changes in video games from then to now.

People will learn about the timeline of video games and there physical changes throughout the years.

This location is all about the memories we make while playing video games. It's about how we feel when we play and how people have experienced joy with video games in both the past and present.

MEMORY

Curators: Ezen & Victoria
GAMING AND CHILLING

Curator: Devki
GAMING AND CHILLING EXHIBIT

You come and chill with your friends and check out some of the interactive things or you play some games or watch some gameplay happening real time.

Learning objectives
Visitors here will learn about different game genres, consoles, where and how games started.

Mediums and materials
- it would be awesome to do different reactions for the floor depending on the kind of shoes you're wearing
- Nice carpet for the floor around the common area and everything else will be sort of this digital floor where it'll react and light up when you step on it. As for the walls there will be posters and canvases of games...10/10 art

Interactive mechanics
- There will be a console area, a PC area and a VR area where the latest and best consoles and other devices are kept.
Gaming in Education

Curator: Jaden
Ocean-based Games

Curator: Ivan and Amy
1 Ocean-based Games

At the entrance, there's a monitor with a welcome video playing. It can show people enjoying the different sections of the museum.

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Mediums and materials</th>
<th>Interactive mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>People here will learn what the museum has to offer and activities they can do.</td>
<td>This location is made of a screen with a video playing and a projector.</td>
<td>Visitors watch a video that welcomes them to the museum and tells them what activities there are.</td>
</tr>
</tbody>
</table>
Ocean-based Games

At this station, you can observe 3D printed concept art and the VR set used to test Subnautica in VR.

Learning objectives
You can learn about how the developers of Subnautica created the game with the use of physical objects.

Mediums and materials
Glass cases, VR sets, 3D printed objects and spotlights

Interactive mechanics
You can view objects and press a button to listen to some audio explaining the object.
# Ocean-based Games

At this station, you can look at photos of the people playing these different games. You also see the creators of the games.

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Mediums and materials</th>
<th>Interactive mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can learn about the creators of specific games and what the game is about. Games like Subnautica and Maneater.</td>
<td>There can be photos of the creators hanged up and maybe even the game on display ok more monitors. There can be also be poster of game covers in this station.</td>
<td>There can be more interactive videos of the games shown above.</td>
</tr>
</tbody>
</table>
Ocean-based Games

At this station, you can play Subnautica, BioShock, Maneater along with other ocean-themed games.

Learning objectives

You can learn about what these games are actually about.

Mediums and materials

Computers, the games themselves, chairs, consoles, controllers, monitors.

Interactive mechanics

You can play the consoles and computers to play the actual games.
Executive Summary

Games & Me

Games & We

My Future & Games

A Gaming Exhibit

Appendix

Player's Choice

Curators: Daniel & Johandra
Player's Choice

This part introduces the idea how a players choices within a game ultimately impacts their gaming experiences. It can also imply on neurological facts about the array of different choices through an example problem.

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Mediums and materials</th>
<th>Interactive mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>People will be able to see how their actions affect their environment, people around them, and themselves as people.</td>
<td>The room is made of cubes of glass that people step into and play in a VR where they chose their story and choices and have to change rooms after a major choice (Choose Your Own Adventure). While they walk to their next stage, they view other people and their choice and even try to influence their choices.</td>
<td>The visitors are able to use VR headsets as ways to participate in the museum's tests and experience the knowledge of how choices impact a person. They will also be able to view things on a 4D cinematic screens that are on the walls. However the twist is that other people can see all of your choices.</td>
</tr>
</tbody>
</table>
2 Player's Choice

This room shows a variety of picture frames that have tech on them. It shows pictures of the very first games to the latest ones. It is very interactive and even present the levels of physiology that is impacted through choices.

Learning objectives
People will be able to decipher the differences and similarities within gaming choices through out time. To learn how being under a time limit can impact the choices you make as well when you are in a team

Mediums and materials
Interactive screens, vr, technical equipment, data, screen projection

Interactive mechanics
The audience is able to use the tech on the picture frames to look at the history about video games that relate to choice making. The audience is put into 2 or 4 groups and they have to decipher the history and their decision making through a kahoot like game. And ultimately teaches how teamwork is important. They are able to swipe and try different challenges.
Exhibit one is the written portion of the exhibit where there are things like old documents or original paper designs of the games. Maybe things like original map designs from old games such as CS source and 1.6.

This will be photos from the game and have original photos from memorable events or things that are important to the history of the games.

People here will learn... that not everything has to be online and there are important things that are written.

It would be designs encased in glass cases so people can look at these documents but they won't get damaged.

People look at the different documents that memorize important things.

This Tactical Shooters exhibit is curated by Ganden, Evan.
Executive Summary

Games & Me

Games & We

My Future & Games

A Gaming Exhibit

THE BIG GAME ROOM

Curator: Jaylen
The History of Video Games

Quick history of the development of games over time and a quick description of how gamers have been viewed.

Learning objectives

very first game ever made, history of the word gamer, timeline of the AAA game companies (when did they start what were there first games etc).

Mediums and materials

multiple screens, chairs (to accommodate for people who need to sit)

Interactive mechanics

As the visitors walk along the path they will come across different screens which each have a video about the history of different games, gamers, and the triple a game companies.
2 The History of Video Games

Introduction and rise in Esports

Learning objectives
- More opportunities in competition
- Emphasis on gaming strategies/gameplay
- New game designs to serve competitive gaming styles

Mediums and materials
- Video clips of gaming styles and games available throughout different time stamps
- What gamers play stats in a survey

Interactive mechanics
- Scrolling through videos of past tournaments
- The gaming community in YouTube and how their video topics have progressed
The History of Video Games

Learning objectives

to teach people just how much games have progressed. Make them look at how different consoles have advanced etc.

Mediums and materials

nintendo
- nes
- game cube
- wii
- wiiU
- switch
sony
- ps
- ps2
- ps3
- ps 4
- ps 5
- (maybe also psp)

Interactive mechanics

let people see diff consoles and maybe also have diff games for all of them
Video Games in Different Fields

Curators: Nicole, Ceyda, Julian
Video Games in Different Fields

This location is about the roles that games play in psychology and vice versa. The audience experiences an account how games can impact mentality both negatively and positively. Also, it encompasses how mentality and perspective deriving from psychology can impact the development of games.

Learning objectives

People here will learn how psychology affects video games.

Mediums and materials

Screens

Interactive mechanics

Change the setting of the room to evoke certain emotions through different video games. I.e. Doom vs animal crossing.
Video Games in Different Fields

This area is to highlight how important computer science is in a video game's ability to function.

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Mediums and materials</th>
<th>Interactive mechanics</th>
</tr>
</thead>
</table>
| Teach how important computer science is important in the decision making of a game | - 2 Wide TV Screen  
- Interactable buttons (much like kahoot with 4 different buttons and an enter button) | The idea is that you are creating a game and on screen there is both a screen with code and screen with a simple game, your objective is to select the right piece of code to fill in the missing piece to finish the game. If incorrectly, it would break and it would bleep red, giving the player a hint much like rereading what they had to fill in. |
# Video Games in Different Fields

This location is about the role games play in music and vice versa. It shows how music can create perspective and mood in games. Also, it projects how games stimulates the music industry around the world.

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Mediums and materials</th>
<th>Interactive mechanics</th>
</tr>
</thead>
</table>
| Learn how music must accommodate to enhance video game experience. | - Screen floor  
- Foam walls in a circular formation  
- Interactable buttons that make instrumentals | People can play a video game and notice how certain music is cued in for certain situations like boss music, new area, etc. A video of an orchestra is played on the floor. |