

February 19, 2021

Rebecca Kelly Slaughter, Acting Chair

Rohit Chopra, Commissioner

Noah Joshua Phillips, Commissioner

Christine S. Wilson, Commissioner

Federal Trade Commission

600 Pennsylvania Avenue, NW

Washington, DC 20580

Re: Request for Investigation of Deceptive and Unfair Practices by the Edtech Platform Prodigy

Dear Acting Chair Slaughter and Commissioners:

Campaign for a Commercial-Free Childhood (CCFC) and the undersigned organizations respectfully request that the Federal Trade Commission (FTC) investigate the practices of the educational platform Prodigy. We believe Prodigy is engaged in deceptive and unfair practices, in violation of Section 5(a) of the Federal Trade Commission Act (15 USC Sec. 45), resulting in potential harm to young people and inequities in education.

Prodigy is an internet-connected, interactive, gamified math platform for 6 to 14 year-olds, reportedly used by millions of students in over 90,000 schools across the United States.

Prodigy Education has attracted educators and parents by promising that Prodigy “is and always will be free.” But this promise elides the fact that there are different versions of Prodigy—one for in-school use and one for students to play at home. While it does cost nothing for schools to implement Prodigy, the in-school version encourages children to play at home. And when children play at home, they are met with a steady stream of advertisements promoting a “Premium annual membership” that costs up to \$107.40.

Prodigy also unfairly manipulates children to ask their parents for a Premium membership through game play. While playing, children are shown virtual rewards that are only accessible if their family purchases a membership.

Prodigy Education’s bait-and-switch tactics not only deceive educators into assigning a platform that puts enormous commercial pressure on families, but also create a new form of inequality in classrooms. Children can access the benefits of Premium memberships—which

include access to coveted virtual items such as costumes and wizard spells—while they play the game in school. Children can see who has the cool stuff and who doesn't, thereby creating two classes of students—those whose families can afford a Premium membership and those whose families cannot. To make matters worse, students with a Premium membership advance through the game faster, creating the false impression that they are more accomplished at math.

Prodigy also deceptively markets itself to both educators and parents as an effective educational tool. It promises to “boost learning outcomes,” “build essential math skills,” and “improve grades and test scores,” among other claims. It cannot substantiate these claims, though it misleadingly boasts that it can. In fact, research Prodigy commissioned through Johns Hopkins University noted a “lack of remediation and actual teaching provided by Prodigy,” and did not substantiate Prodigy Education’s efficacy claims.<sup>1</sup>

Experts and regulators have long recognized the vulnerability of young people to unfair and deceptive practices, taking into account their immature critical thinking skills, their limited knowledge and experience, and their impulse inhibition.<sup>2</sup> Prodigy is preying upon that vulnerability in a particularly egregious manner, because it targets young people, their parents, and our schools in the midst of a pandemic, when families are much more reliant than ever on remote learning. Due to coronavirus, many schools in the U.S. are being conducted exclusively online, and almost every school in the U.S. is employing or recommending online learning as part of students’ routines. In a deceptive and unfair manner, Prodigy has profited by becoming an important part of that routine for millions of families, exposing kids to harm and exacerbating inequities in education.

## **Background**

Prodigy is an online math game, owned by Prodigy Education, headquartered in Toronto, Canada. It is designed for first through eighth graders to play during the school day and also after school. The game can be accessed on any internet-connected device, using an app or browser to access Prodigy’s website. According to Prodigy Education, the game is assigned in 90,000 U.S. schools as part of their curriculum, is used by millions of U.S. students, and has 100 million registered users worldwide.<sup>3</sup>

Prodigy is provided free to schools and is touted as a free game to educators and parents in promotional materials. However, Prodigy Education sells “Premium memberships” for children who play Prodigy, with benefits described below, which are promoted heavily in the free game. An annual Premium membership for one student costs \$59.88, or a total of

---

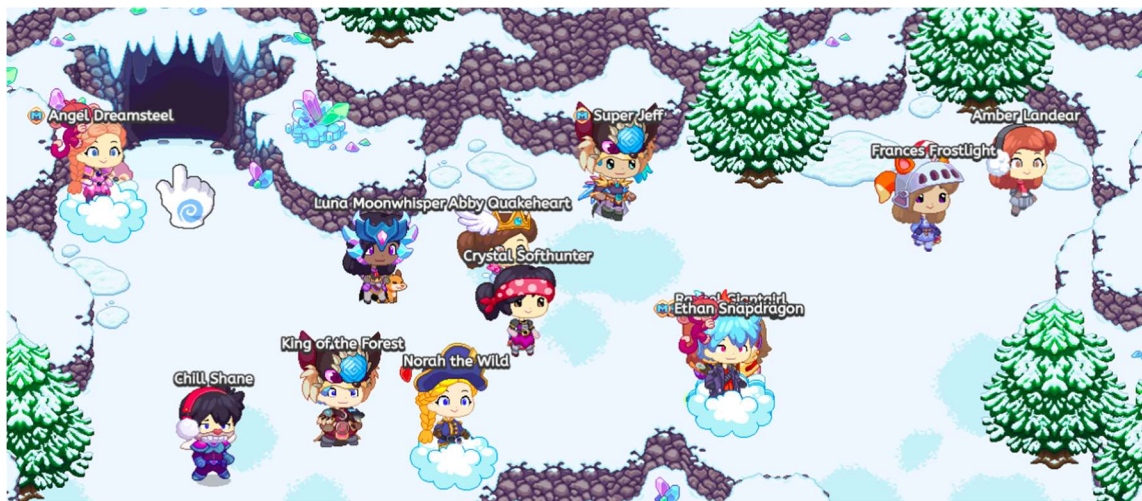
<sup>1</sup> Jennifer Morrison, Kelsey Risman, Joseph Reilly, and Jane Eisinger. “An Evaluation of Prodigy: A Case-Study Approach to Implementation and Student Achievement Outcomes.” *Johns Hopkins. Center for Research and Reform in Education*, January 1, 2020. <http://jhir.library.jhu.edu/handle/1774.2/62841>.

<sup>2</sup> Jenny Radesky, Yolanda (Linda) Reid Chassiakos, Nusheen Ameenuddin, Dipesh Navsaria and Council on Communications and Media, *Pediatrics* July 2020, 146 (1) e20201681; DOI: <https://doi.org/10.1542/peds.2020-1681>. Self-Regulatory Program for Children’s Advertising, Children’s Advertising Review Unit (CARU), Core Principles, p. 5 <https://bbbnp-bbbp-stf-use1-01.s3.amazonaws.com/docs/default-source/caru/self-regulatory-program-for-childrens-advertising-revised-2014-.pdf>

<sup>3</sup> PR Newswire, “Prodigy Education Raises One of the Largest Series B Rounds in Global EdTech History,” January 12, 2021. <https://www.prnewswire.com/news-releases/prodigy-education-raises-one-of-the-largest-series-b-rounds-in-global-edtech-history-301205869.html>

\$107.40 if paid in monthly installments.<sup>4</sup> Prodigy Education appears to reap substantial profits from sale of these memberships and tutoring, as it announced in January 2021 that it had secured capital funding worth 125 million U.S. dollars.<sup>5</sup>

Prodigy is a role-playing game where students' customized characters explore fantasy worlds and students answer math questions to "battle" opponents. The construct is that players are working against an evil puppet master who hates math and has closed the Academy so no one on Prodigy Island can learn. Students navigate each area of the Island to collect keystones that will allow the learning academy to open again. To do so, students engage in battles and complete quests which involve answering math questions correctly in order to cast spells, defeat opponents, and move forward in the game. When members win battles, they receive stars—which contribute to their score or "wizard level"—and prizes like coins, clothing, and weapons. Winning battles also allows students to "rescue" their opponents as pets, keeping a collection of Pokémon-like creatures who battle alongside them (and who evolve, if students have a membership).



*Avatars of Students playing Prodigy online.*

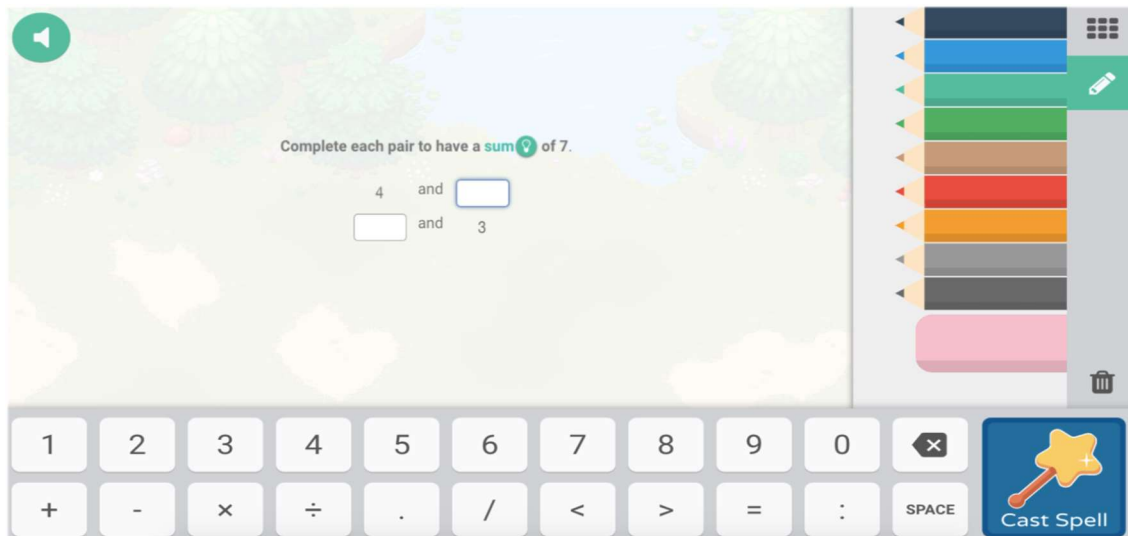
The "math battles" arise each time a student comes across a monster. Students must answer standardized-test style questions in order to cast spells against their opponents. Prodigy asserts that the math content is aligned with Common Core standards and is customizable by teachers. The platform's tracking tool lets teachers and schools see how often students are playing, how many questions they're answering, and how they're performing for their grade levels. It also allows parents to see their child's progress and to send them virtual rewards when they get a certain number of questions correct.

Prodigy Education asserts that as students answer questions, the program adapts by offering more advanced content or repeating concepts that a student is struggling with. As discussed further below, Prodigy does not instruct children on math skills in any way—it only offers practice at answering math questions.

---

<sup>4</sup> Prodigy Education also introduced a tutoring program in 2020, with online math tutoring sessions at \$30 per session or \$24 per week.

<sup>5</sup> PR Newswire, January 12, 2021.



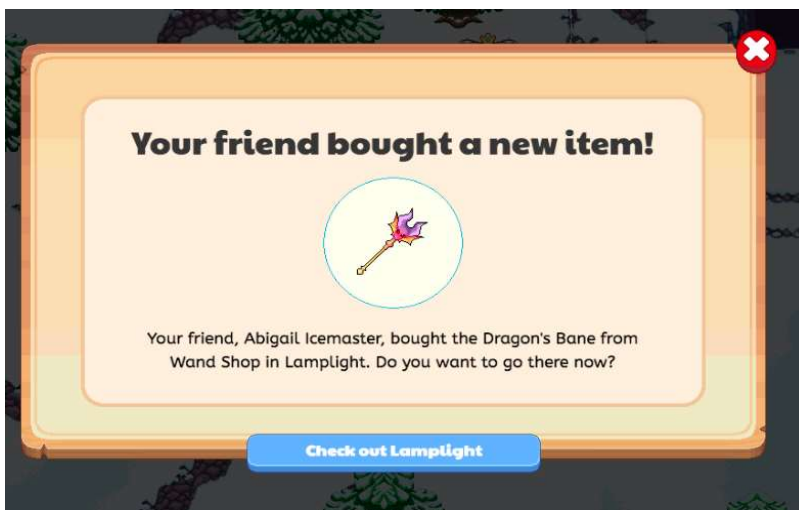
*An example of a math question students see while they play Prodigy.  
Math questions are always in this format.*

Throughout the game, students are frequently presented with various entertaining and/or attractive distractions. Players are invited to a variety of stores where they can purchase virtual items using pretend Prodigy currency that they earn through game play or receive as a part of their Premium membership. The currency takes the form of “coins”—some of them themed for use only in certain areas of Prodigy Island. Items available at the stores include “buddies” (cute animals that walk alongside the student’s avatar), hair styles, wands, and clothing, among other things. These cosmetic items generally do not enhance the student’s ability to successfully complete the game’s mission. Many of the most interesting and/or desirable items are only available to Premium members, regardless of how much currency a player has earned, and non-members are often shown items that they cannot access unless they purchase the membership.

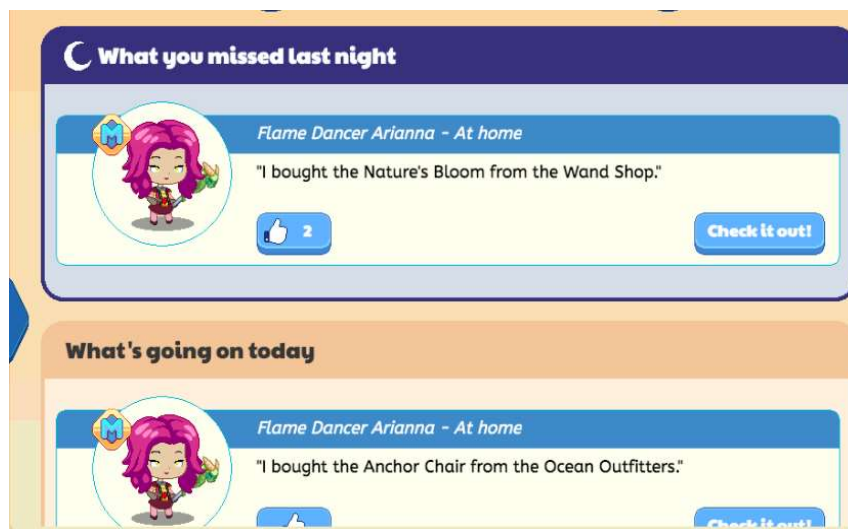
Prodigy also has social media-like features through the “Wizard Watch” function, where children can “friend” their peers and strangers and see what these other players purchase or earn throughout their play. Students are consistently reminded of what others are doing and purchasing and of whether they are Premium members or not. Students can also click on other players at any time to see what they own, their wizard level, and whether they are a Premium member (displayed as a shiny badge). Players can communicate with one another using pre-selected text, dance moves, and changing their emotions by selecting from a menu of options while standing nearby another player.



*When players buy things in the game, they are labelled with titles like "shopaholic," which is then shared on the Wizard Watch.*



*A pop-up announcement telling the player that their friend just bought something and how to buy it themselves.*



*Another player's activities are displayed on the Wizard Watch feature. The M badge shows that they are a member.*

Prodigy Education encourages teachers to invite students to play at home to continue their practice, and some teachers suggest it or assign it as homework. In a pre-pandemic study, 41% of in-game questions were answered in the “at home” version of the game.<sup>6</sup> With many American schools now doing remote learning from home as all or part of their instruction, many students play Prodigy from home during the school day, with the option of using the “in-school” or “at-home” version.

Prodigy Education promises administrators and educators that Prodigy creates a seamless transition from in-class to at-home math practice because teachers receive data from both. They suggest: “Make us your go-to-platform for effective blended and virtual learning. It’s so fun they’ll never want to stop.”<sup>7</sup>

Children playing the in-school version can play solely with members of their class. But many of the game’s features are locked when children play “at school.” Some areas are marked “Play at home to access this area,” and can be accessed by both members and non-members alike on the home version. Other areas, which require membership, are marked “Play at home and ask your parent how to unlock this.” If the child tries to access such areas in the “home” version, they remain locked, and the player is told that they can access the area if they purchase a membership. Students playing the in-school version also receive messages like “come back after 4 PM to spin this prize wheel” to encourage them to play additional hours on the “home” version.



*Non-members playing at school are blocked from rescuing more than 10 pets and then told to play at home to find out how to unlock this feature. When they play at home, they are told to ask their parent to purchase a membership.*

<sup>6</sup> Prodigy website download, accessed February 10, 2021 “How Prodigy engaged Tennessee students with math practice,” April 26, 2019, p. 2-3. [https://prodigy-website.cdn.prismic.io/prodigy-website/38ce400b-3fdb-49a9-9daa-0d048e70d3d4\\_Tennessee-Case-Study.pdf](https://prodigy-website.cdn.prismic.io/prodigy-website/38ce400b-3fdb-49a9-9daa-0d048e70d3d4_Tennessee-Case-Study.pdf)

<sup>7</sup> Prodigy website, accessed February 10, 2021, “Prodigy Math Game makes curriculum-aligned learning fun.” <https://www.prodigygame.com/main-en/teachers>





*Non-members playing at school are blocked from evolving their pets and told to play at home. When they play at home, they are told to ask their parent to purchase a membership.*

When students who do not purchase a membership play Prodigy on the home version they face a steady stream of marketing for the Premium membership, much of it using persuasive design to maximize players' engagement. Players see frequent announcements embedded in the sequence of game play such as "Rescue Pets" or "Get More Stars"—when the child clicks they are led to a membership advertisement. A common membership advertisement throughout the game says "Members Get Amazing things" (see below) and offers a menu of all of the items students are missing as non-Members.



*A screenshot of a frequently encountered "Members Get Amazing Things" advertisement.*

Players are also frequently invited to choose between game accoutrements—one much more attractive than the other. For example, children are presented with a sparkly, bejeweled treasure chest and a plain wooden one. But non-members are unable to access the sparkly treasure chest; when they click on it, they see an advertisement for the Premium membership.



*Children are asked to choose between two boxes, but the sparkly one is really only for members.*

Prodigy is designed to promote engagement for long periods of time. Prodigy Education asserts that “[t]he longer students play, the more questions they answer. This is why engagement is key to increasing math practice.”<sup>8</sup> But that longer time in the game also exposes students to more advertising, and our research found that students can see up to four times more advertisements than math battles during their time in the game. As discussed below, teachers have expressed concern that oversight is necessary to limit children’s time in the game.

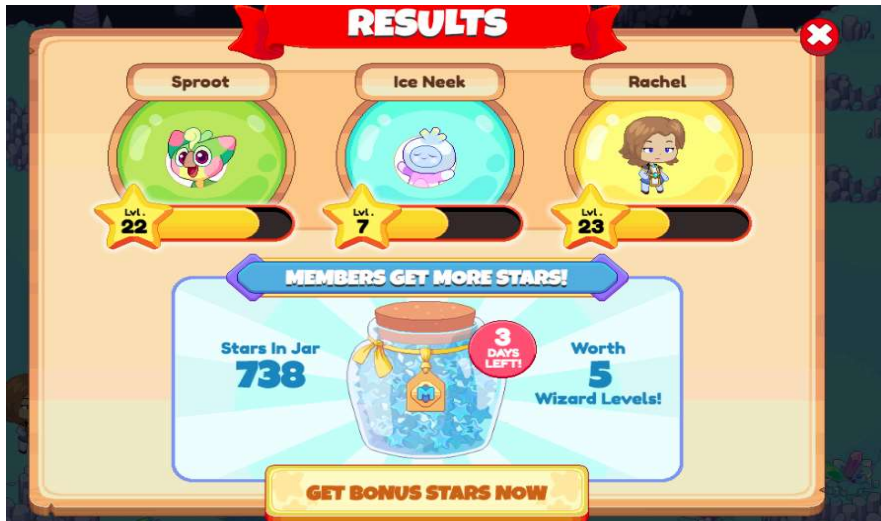
Prodigy Education states that the educational content is the same for members and non-members. However, there are fundamental differences between the experiences of students with free accounts and those with paid, Premium accounts.

When playing at home, students with Premium memberships do not see the relentless advertising. They also enjoy uninhibited access to all of the fun bells and whistles—like character customizations, rescuing an infinite number of pets, and special monthly boxes of goodies to show off to their friends. While subscriptions can only be purchased at home, when kids play at school their subscriptions still confer benefits. For instance, the spells and clothing that students accumulate as Premium members can be both acquired and used while students play the in-school version, allowing classmates to know who does and doesn’t have a membership. Members are also better able to succeed in the game—they can “level up” faster; if a non-member and a member answer the same number of questions correctly, the member will earn a higher wizard level. Higher wizard levels allow students to access content faster, and, Prodigy Education says, they also provide a boost of confidence to students.

---

<sup>8</sup> Prodigy website download, accessed February 10, 2021 “How Prodigy engaged Tennessee students with math practice,” April 26, 2019, p. 2-3. [https://prodigy-website.cdn.prismic.io/prodigy-website/38ce400b-3fdb-49a9-9daa-0d048e70d3d4\\_Tennessee-Case-Study.pdf](https://prodigy-website.cdn.prismic.io/prodigy-website/38ce400b-3fdb-49a9-9daa-0d048e70d3d4_Tennessee-Case-Study.pdf)





*When non-members finish a math battle, they always see the narrative that "Members get more stars" which boosts their overall level in the game.*

### **Prodigy's Unfair and Deceptive Practices**

Section 5 of the FTC Act declares deceptive and unfair practices unlawful. The Commission finds deception if there is a representation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment.<sup>9</sup>

Pursuant to 15 U.S.C. § 45(n), practices are unfair under Section 5 of the FTC Act if (1) they cause or are likely to cause substantial injury to consumers, (2) the injury cannot reasonably be avoided by consumers, and (3) the injury is not outweighed by any countervailing benefits to consumers or competition.<sup>10</sup>

Prodigy is engaged in the following practices in violation of Section 5 of the FTC Act:

- 1. Prodigy has deceptively marketed its platform to schools and parents as "free," and concealed from schools that there is a paid premium version which Prodigy relentlessly markets to students when they play at home, and which exacerbates inequities.**

Prodigy entices schools, teachers, and parents with false claims that the game is free and always will be. Prodigy backs up this deception by showing educators a sanitized version of the game that is different from what kids play at home.

Prodigy's representations that the game will always be free are numerous and include:

- On an informational webpage for teachers, Prodigy Education states: "How much does Prodigy Math Game cost? Nothing! Prodigy Math Game is—and always will be—completely free for you and your students." (see below)

<sup>9</sup> FTC Policy Statement on Deception, Appended to Cliffdale Associates, Inc., 103 F.T.C. 110, 174 (1984). [https://www.ftc.gov/system/files/documents/public\\_statements/410531/831014deceptionstmt.pdf](https://www.ftc.gov/system/files/documents/public_statements/410531/831014deceptionstmt.pdf)

<sup>10</sup> 15 U.S.C. § 45(n).

## How much does Prodigy Math Game cost?

Nothing! Prodigy Math Game is — and always will be — completely free for you and your students.

We'll never ask educators for their credit card info, and we'll never charge you for any of the amazing features Prodigy Math Game offers teachers.

- On an informational page for parents, Prodigy Education states “All educational content is free for children—forever.”<sup>11</sup> (see below)



**Always accessible.** All educational content is free for children — forever.

- As recently as August 2020, its homepage proclaimed that Prodigy was “no cost, ever.”<sup>12</sup> (see below)

prodigy

NEW  
Math Tutoring District/School Parents Memberships Research Support Log in Play Prodigy

The engaging, curriculum-aligned math platform loved by over 50 million students, teachers and admins. No cost, ever.

Easily motivate 1st to 8th grade students to learn and practice math.  
Accessible at home or in class!

Get your free account Watch video

- On an informational page for administrators, Prodigy says the game is “Free forever” (see below).<sup>13</sup>

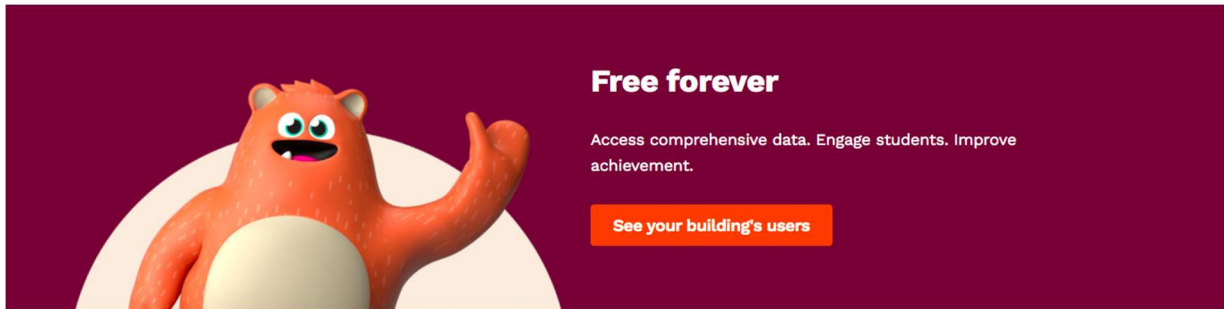
<sup>11</sup> Prodigy website, accessed February 10, 2021. “Help your child love learning.”

<https://www.prodigygame.com/main-en/parents/>

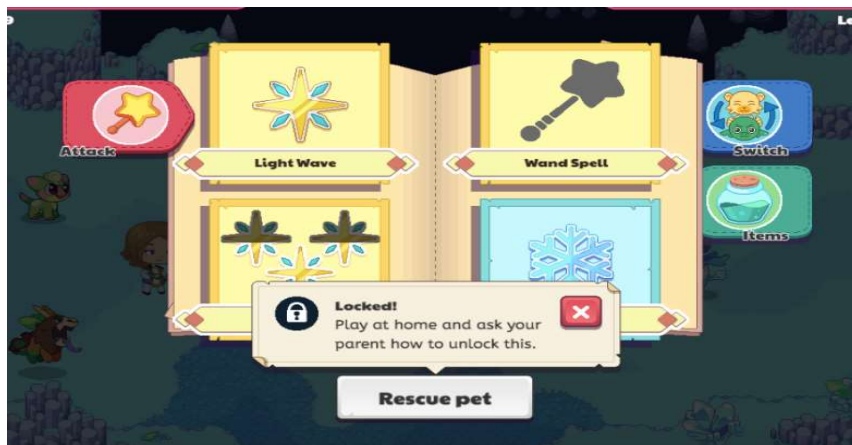
<sup>12</sup> Prodigy website, accessed August 2020. “Make math learning at home or at school.”

<https://www.prodigygame.com/main-en/>

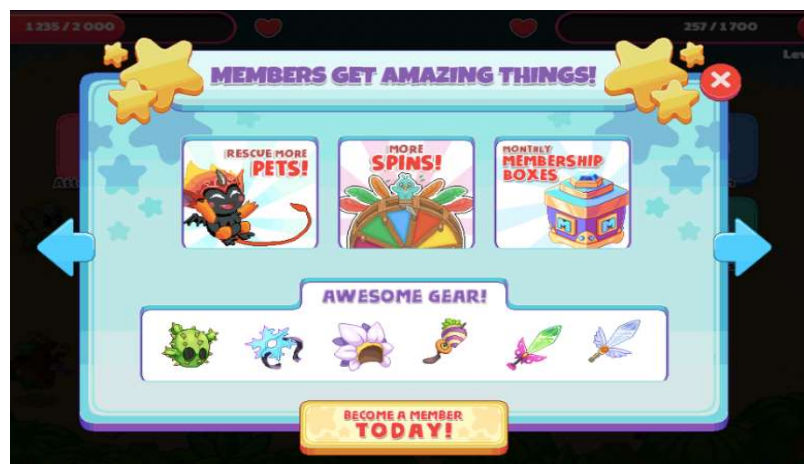
<sup>13</sup> Prodigy website, accessed February 10, 2021. “Administrators.” <https://www.prodigygame.com/main-en/admin>



Each of these claims is false. As discussed above, the version of Prodigy kids play at school is free and contains no marketing for Premium memberships. But by offering glimpses of areas of the game that are off-limits during in-school play, Prodigy encourages kids to also play after school, on a version of Prodigy rife with aggressive marketing and game features designed to make children covet an expensive annual membership, at a cost of \$59.88, or \$107.40 if paid in monthly installments. Ads take the form of videos and newsfeeds that showcase the bells and whistles Premium members enjoy that free players cannot, and throughout play kids are enticed with game features—in many cases literally sparkly objects—which are only available to Premium members.



*What a non-member sees in the school version when they click on "Rescue Pet."*



*What a non-member sees in the home version when they click on "Rescue Pet."*

Prodigy's deceptions are material to educators' decisions to assign or recommend the game as part of their curricula. Most educators would not choose to subject children to relentless commercial pressure nor assign a product that places a significant financial burden on families. It is also unlikely educators would assign the game if they were aware of Premium memberships and the inequities they create in the classroom; as discussed above, students with Premium level up faster and have access to more coveted prizes so that students can see which of their classmates have memberships and which do not.

Prodigy's misrepresentations are also material to parents' decision to allow their children to play the game at home. As discussed above, Prodigy Education's misrepresentations are likely a factor in schools assigning the game and encouraging students to play at home. The school's recommendation is in turn a key factor in parents' decision to let their children play at home. Parents are also more likely to allow their children to play at home given Prodigy Education's false assertion to parents that the game is always free.

The reliance upon Prodigy's deception acts to the detriment of children and families. Without it, many kids would not have been assigned or permitted on the platform. This is particularly troubling in the case of low-income families, who may be forced to choose between purchasing a subscription they can't really afford or risking that their child will appear to fall behind in math.

## **2. Prodigy unfairly uses persuasive design to move children to nag their parents for a paid membership, and thereby perpetuates inequities.**

Prodigy's full-court press to persuade and even shame children and families into purchasing an expensive membership is unfair to both children and parents.

It is generally understood that children are more vulnerable to advertising than adults and that advertisers have a special responsibility to "take into account the limited knowledge, experience, sophistication and maturity of the audience to which the message is directed."<sup>14</sup> The Children's Advertising Review Unit (CARU) guidelines, for example, prohibit many of the practices used by Prodigy. These include:

1. Advertising should not urge children to ask parents or others to buy products.
2. Advertisers should avoid using sales pressure in advertising to children, e.g., creating a sense of urgency by using words such as "buy it now."
3. Advertisements should not convey to children that possession of a product will result in greater acceptance by peers or that lack of a product will result in less acceptance by peers.

As shown above, Prodigy violates the first principle by explicitly telling children in the in-school version to "play at home and ask your parents how to unlock this." Similarly, Prodigy creates a sense of urgency in violation of the second principle when it tells students to "Get Bonus Points Now." Likewise, the mandate to avoid sales pressure is violated when children are given a choice between a plain wood or sparkly blue treasure box as a reward, and if

---

<sup>14</sup> E.g. Children's Advertising Review Unit (CARU) Advertising Guidelines, Core Principle 1, <https://bbbnp-bbbp-stf-use1-01.s3.amazonaws.com/docs/default-source/caru/self-regulatory-program-for-childrens-advertising-revised-2014-.pdf>

they select the sparkly one, they are told that if they don't upgrade at that moment, they must settle for the wooden box.

Several of Prodigy's practices violate the third principle by conveying to children that getting a membership will result in greater acceptance by their classroom peers. Children who play Prodigy without a Premium membership are constantly reminded of their "lesser" status. Players with Premium memberships get access to flashy costumes and accessories for their wizard characters that are unavailable to players that only have the free version. Children can see what their friends' characters are wearing, making it clear who has a Premium membership and who does not. The avatars of kids without memberships literally walk in dirt while those of kids with memberships ride around on clouds (see photo below). Prodigy often uses social comparison as part of its relentless pressure on kids to buy new outfits or change their looks. One social media-style feature, called "Wizard Watch" even reports on what other players have purchased while pop-up ads encourage children to keep up with their friends.



*A member rides on a cloud and wears special accessories next to a non-member.*

The use of peer pressure to sell memberships was also noted by the Johns Hopkins researchers. The study noted that the "most prominent concern" among students at one of the two schools involved in the study "related to the membership component of the game. Comments tended to revolve around the additional rewards that members receive, and the additional capacities those students have to conduct spells and customize their avatar and pets."<sup>15</sup> It also found that "Students in both schools displayed authentic emotional responses to the plight of their avatar and pet and they engaged in dynamic social interactions with their in-class peers with whom they battled. Members of the research team felt that students were genuinely happy to show off their abilities in the program."<sup>16</sup> In showing off their abilities, however, children with a Premium membership have a significant advantage. They have access to new worlds in the game, they can "level up" faster, and have a greater ability to win their math battles. Children without memberships are left with a lower score for the same effort. This is unfair and demoralizing to students whose families cannot afford a membership.

---

<sup>15</sup> Morrison et al., p. 13.

<sup>16</sup> *Id.* at 25.





*When children complete a math battle, they are greeted with the opportunity to have a higher score-- but only if they purchase a membership.*

Prodigy's business model is also unfair to children in that the constant disruption of the game play by promotions for in-app purchases lowers the educational value of the game for those who do not purchase Premium. But even when children play in school and do not see ads for Premium, the educational value of the game is undermined by constant distractions. The Johns Hopkins researchers noted that "distractions from mathematics content come from within the game," and observed that "students spend time dressing their avatar, rearranging their house, traveling or wandering around various rooms or worlds, swapping out tools and/or reviewing options available for war."<sup>17</sup>



*An example of an advertisement presented to students in the form of an "email" in an in-game inbox.*

<sup>17</sup> *Id.* at 12.



Prodigy’s manipulations and misrepresentations are particularly unfair to low-income families for whom the cost of a subscription represents a significant financial burden. Families who cannot afford a subscription are likely to feel they are shortchanging their children’s education. And given that Prodigy makes very clear during game play which students have memberships and which do not, children from families who cannot afford Premium are painted as and made to feel like “have-nots.” In this way, Prodigy introduces a new form of inequality and unfairness into educational environments. Prodigy’s model is the equivalent of giving wealthy kids in a classroom a shiny new textbook with a surprise toy inside, while kids from low-income families get an old, beaten-up edition, and the shame of being a have-not.

The harms caused by Prodigy’s unfair marketing—including the purchase of a costly subscription or children feeling inferior to their peers—are substantial. Since the game is played in or assigned by schools, children are a captive audience. They have no way to avoid these harms. Parents are forced to choose between two bad outcomes: 1) spending money they don’t have or 2) enduring nagging from their children caused by Prodigy’s marketing and, it would seem, risking their children’s academic and social success. Prodigy’s unfair marketing offers no countervailing benefits to consumers or competition. Instead, it actually undermines any educational value of the game. Therefore, Prodigy’s use of manipulative persuasive design to promote expensive memberships is an unfair practice.

### **3. Prodigy Education unfairly and deceptively advertises its platform to educators and parents as an effective math teaching tool.**

In marketing to schools and parents, Prodigy Education makes numerous express and implied claims that the game teaches math and will improve students’ math skills and test scores. And it asserts that it has research and evidence to support these claims.

For example, under a section for Administrators, including a page entitled “7 Reasons Prodigy is right for your school,” Prodigy claims that:

- “Despite being free and easy to use, Prodigy is a powerful platform for math instruction and supplementation.”<sup>18</sup>
- “Students practice math and learn new skills as they navigate a fantasy world packed with action and adventure. Built to captivate students and motivate learning, Prodigy brings math curricula and custom assignments to life in a world where success depends on practicing and mastering more than 1,400 key math skills.”<sup>19</sup>
- “Research supports the use of Prodigy: Research suggests Prodigy can improve math scores and effectively supplement student growth. In a study involving thousands of students in 171 schools across five U.S. school districts, we found evidence that schools enrolled in Prodigy consistently outperform those that don’t on standardized assessments.”<sup>20</sup>

---

<sup>18</sup> Prodigy website, accessed February 10, 2021. “Engage and motivate math students as teachers *differentiate*.” <https://www.prodigygame.com/main-en/admin/>

<sup>19</sup> Prodigy website download, accessed February 10, 2021. “7 Reasons Prodigy is right for your school.” Download available [https://prodigy-website.cdn.prismic.io/prodigy-website/5129bb00-2522-495c-92c1-2ae808cf15a9\\_7-reasons-Prodigy-is-right-for-your-school.pdf](https://prodigy-website.cdn.prismic.io/prodigy-website/5129bb00-2522-495c-92c1-2ae808cf15a9_7-reasons-Prodigy-is-right-for-your-school.pdf)

<sup>20</sup> *Id.*

Prodigy Education has made similar bold claims of efficacy directed at parents to encourage them to permit their children to play the game, and to purchase Premium memberships for them. These are among the claims they have directed at parents:

- “Unlock extra features and fun rewards that help build essential math skills for grades 1 to 8. Prodigy is teacher-approved and proven to boost learning outcomes.”<sup>21</sup>
- “Help your child learn more. Keep them engaged with math to encourage a growth mindset and foster success!”<sup>22</sup>
- “More math skills mastered. It’s challenging and rewarding.”<sup>23</sup>
- “Think of Prodigy as math homework disguised as a video game. To win challenges, your child must correctly answer math questions. The more they play, the more they learn and build essential math skills — improving grades and test scores.”<sup>24</sup>
- “It’s fun to build new math skills with our curriculum-aligned game, loved by over 90 million 1st to 8th grade students – and their teachers – worldwide.”<sup>25</sup>
- “Take learning to the next level with a Membership. Premium Members spend more time playing, answer more questions and master more math skills.”<sup>26</sup>

And these claims Prodigy Education directs at parents specifically assert that Prodigy *can substantiate its educational claims*.

- “Prodigy Math game works. We have proof.”<sup>27</sup>
- “Whether your child has one [a Premium membership] or not, you can find comfort in knowing:
  - Prodigy helps improve math skills and increase confidence
  - Your child is using a digital math product, loved and approved by over 1.5 million teachers

---

<sup>21</sup> Prodigy website, accessed February 10, 2021. “Boost Your Child’s Math Learning with a *Premium Membership*.” [https://www.prodigygame.com/main-en/prodigy-member/?utm\\_source=googlesem&utm\\_medium=membership\\_cpc&utm\\_campaign=parent\\_memberships\\_br\\_and-prospecting\\_&utm\\_term=us\\_netnew\\_all\\_&utm\\_content=product\\_na\\_pe\\_text\\_485777437320-%2Bprodigy%20%2Bmembership\\_petg&utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=10976469784&ag=111876511382&keyword=%2Bprodigy%20%2Bmembership&network=g&placement=&device=c&device\\_model=&gclid=Cj0KCQiA6t6ABhDMARIsAONIYywFbdMOPflnFYK8mYZAVPrp6kawnPOzGxcE\\_x5gr4O2F9SC3fsUGNQaAorjEALw\\_wcB](https://www.prodigygame.com/main-en/prodigy-member/?utm_source=googlesem&utm_medium=membership_cpc&utm_campaign=parent_memberships_br_and-prospecting_&utm_term=us_netnew_all_&utm_content=product_na_pe_text_485777437320-%2Bprodigy%20%2Bmembership_petg&utm_source=google&utm_medium=cpc&utm_campaign=10976469784&ag=111876511382&keyword=%2Bprodigy%20%2Bmembership&network=g&placement=&device=c&device_model=&gclid=Cj0KCQiA6t6ABhDMARIsAONIYywFbdMOPflnFYK8mYZAVPrp6kawnPOzGxcE_x5gr4O2F9SC3fsUGNQaAorjEALw_wcB)

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> Prodigy website, accessed February 10, 2021. “Parents: Help Your Child Love Learning” <https://www.prodigygame.com/main-en/parents/>

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

- A premier center for education research has proven Prodigy Math Game increases math achievement
- The more students use Prodigy Math Game at school and at home, the more their understanding will deepen, skillset will grow, and grades will improve.”<sup>28</sup>

In fact, however, Prodigy does not teach math or improve students’ understanding or test scores. Dr. Susan Linn, Ed. D., a psychologist and expert on creative play,<sup>29</sup> has been researching Prodigy for her upcoming book entitled *Who’s Mining the Kids*,<sup>30</sup> questions whether the game teaches math at all:

Since I could find no research proving that Prodigy is more effective in helping kids learn math than any other technique, or that kids playing Prodigy learn to love math, I called the company’s support line to ask whether they had any. They don’t. I’m not surprised. There are lots of ways of helping kids learn to enjoy math—or at least experience its usefulness and its connection to their lives and activities. Depending on children’s ages these could include building with blocks, conducting surveys, measuring themselves, each other and things around them, constructing models and more. In these activities working with numbers, measures, diagrams, scales, and number concepts is essential to the experience.

In Prodigy, despite the fact that solving math problems is the way to win battles, math is something to be gotten through in order to have fun in the rest of the game. In fact, one message children could take from Prodigy is that math must be like medicine disguised in applesauce or pudding—so distasteful that the only palatable way to consume it is if it’s immersed in something much more appealing.<sup>31</sup>

Even the Johns Hopkins study cited by Prodigy, which was funded by Prodigy,<sup>32</sup> did not find that Prodigy effectively taught children math. This study examined student achievement and usage data from two mid-sized schools in the southern US, visited two schools, and conducted interviews, focus groups, and classroom observation. The researchers noted that “Teachers and principals in both schools were reluctant to attribute student achievement to Prodigy. School-based adults were more likely to talk about increased engagement or note that students were getting additional mathematics practice.”<sup>33</sup> Students indicated that they “especially like the social components—they like battling their friends, being in a virtual world with their classmates, and knowing that others are playing with them when they are at home.”<sup>34</sup> They also found that “students who consistently answered questions incorrectly were still able to move about the world, engage in battles, and were often presented with the exact same questions they previously answered incorrectly and were subsequently given the

---

<sup>28</sup> Prodigy website, accessed February 10, 2021, “Is a Prodigy Membership Worth It? Your Questions Answered.” <https://www.prodigygame.com/main-en/blog/is-prodigy-membership-worth-it/>

<sup>29</sup> Dr. Linn is also founder and former Executive Director of Campaign for a Commercial-Free Childhood.

<sup>30</sup> Linn, Susan, Forthcoming in 2022. “Who’s Mining the Kids,” *New Press*.

<sup>31</sup> *Id.*

<sup>32</sup> Via email on July 14, 2020 the lead researcher, Jennifer Morrison, informed CCFC that Prodigy had funded the study.

<sup>33</sup> *Id. at iv.*

<sup>34</sup> *Id. at 25.*

answer to. Researchers, and teachers, noted the lack of remediation and actual teaching provided by Prodigy.”<sup>35</sup>

In terms of the effect of Prodigy on achievement gains in the state standardized test, achievement, the study found that the “overall impact is statistically significant but quite small, and the implication is that students would need to spend substantially more time in the program for it to make a meaningful impact on their performance on a standardized test.”<sup>36</sup> The researchers found<sup>37</sup> that in order to raise standardized math scores by just one point, a child would have to answer 888 Prodigy math questions, which would likely take 30 to 40 hours of gameplay.<sup>38</sup> And crucially, contrary to the claims made to parents, these modest results were only found when students played the game at school; no significant relationship was found between playing the game at home and improvement on standardized math assessments.<sup>39</sup>

CCFC’s research showed that the time spent doing math problems, absent instruction, is dwarfed by the fun and games time on Prodigy. In our research of the free at-home version, over a 19-minute period we saw 16 unique advertisements for membership, as well as opportunities to see ads via shopping and social play, and only four math problems. That’s four ads for each opportunity to concentrate on math.

The weak findings of the Hopkins study do not provide competent and reliable scientific evidence for a reasonable basis to support Prodigy’s many claims to educators and parents that the game is effective and will improve students’ math ability. The study also fails to meet the FTC’s substantiation requirements.

When an advertiser makes an express or implied assertion that it has support for its product claims—such as saying “tests prove,” “doctors recommend,” or “studies show,” the FTC requires them to have at least the advertised level of substantiation.<sup>40</sup> The claims must be true and not misleading, and based on competent, reliable specific evidence—“tests, analysis, research, or other studies that have been conducted and evaluated in an objective manner by qualified persons and are generally accepted in the profession to yield accurate and reliable results.”<sup>41</sup> The failure to possess and rely upon a reasonable basis for objective claims constitutes an unfair and deceptive act or practice in violation of Section 5 of the Federal Trade Commission Act.<sup>42</sup>

---

<sup>35</sup> *Id.*

<sup>36</sup> *Id. at 36.*

<sup>37</sup> Morrison et al., 2020. p. 20

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> FTC Policy Statement Regarding Advertising Substantiation, appended to Thompson Medical Co., 104 F.T.C. 648, 839, at 1 (1984), *aff’d*, 791 F.2d 189 (D.C. Cir. 1986), cert. denied, 479 U.S. 1086 (1987). 54 *Id.* at 1.

<sup>41</sup> In re Focus Education, LLC, FTC Docket No. C-4517, consent order, April 8, 2015, <https://www.ftc.gov/system/files/documents/cases/150409focuseducationdo.pdf>. In a letter to CCFC dated March 31, 2014,

<sup>42</sup> FTC Policy Statement Regarding Advertising Substantiation at 1.

Prodigy Education also touts a “case study,” with the bold headline “How Prodigy helped more Texas students to succeed.”<sup>43</sup> Linked to the above claim that “Research supports the use of Prodigy,” Prodigy Education reports that a review of five Texas school districts in 2018 shows that students in the 119 schools where at least 20% of students used Prodigy did marginally better on exams than students in the 51 schools where less than 20% of students used Prodigy.<sup>44</sup> This is far from the competent and reliable scientific evidence which the FTC requires to substantiate Prodigy Education’s claims that the game works. It was not “conducted and evaluated in an objective manner by qualified persons and are generally accepted in the profession to yield accurate and reliable results.” And buried near the end of its report on this Texas case study, Prodigy Education acknowledges that the information is not substantiation of its claims:

This case study shares some observations where playing Prodigy seemed to correlate with students’ math performance. While not a randomized trial, these observations may suggest some patterns of interest.<sup>45</sup>

Prodigy Education is also intentionally misleading *someone* about the educational benefits of a Premium membership—since it tells parents the benefits are substantial yet tells educators there are none. On its website, on a page entitled “Is a Prodigy Membership Worth It? Your Questions Answered,” Prodigy Education tells parents:

We’ve seen it firsthand! **Kids with Premium Memberships:**

- Answer more questions
- Master more math skills
- Spend more time learning

When your child learns more, they achieve more *and* become more confident in their abilities.<sup>46</sup>

Yet Prodigy education tells educators:

All math, reporting, and access to Prodigy is completely free — and free forever. The only way we make money is through a completely optional Membership for game features such as character clothing — *an upgrade with absolutely no impact on Prodigy’s educational quality.*<sup>47</sup> (emphasis added)

---

<sup>43</sup> Prodigy website download, accessed February 10, 20201. “How Prodigy helped more Texas students succeed,” May 10 2018. Available for download [https://prodigy-website.cdn.prismic.io/prodigy-website/c290f944-43d1-4406-853a-8913e3db73f9\\_Prodigy-Case-Study.pdf](https://prodigy-website.cdn.prismic.io/prodigy-website/c290f944-43d1-4406-853a-8913e3db73f9_Prodigy-Case-Study.pdf)

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> Prodigy website, accessed February 10, 2021, “Is a Prodigy Membership Worth It? Your Questions Answered.” <https://www.prodigygame.com/main-en/blog/is-prodigy-membership-worth-it/>

<sup>47</sup> Prodigy Education, accessed February 8, 2021, “7 Reasons Prodigy is right for your school.” [https://prodigy-website.cdn.prismic.io/prodigy-website/5129bb00-2522-495c-92c1-2ae808cf15a9\\_7-reasons-Prodigy-is-right-for-your-school.pdf](https://prodigy-website.cdn.prismic.io/prodigy-website/5129bb00-2522-495c-92c1-2ae808cf15a9_7-reasons-Prodigy-is-right-for-your-school.pdf)

Acting in reliance upon Prodigy's deception, educators and parents have brought the platform into schools and homes, and parents have purchased the Premium version. These actions have been to the detriment of educators struggling to plug effective tools into their curricula, to the detriment of students spending excessive periods of time playing a game which is not effective rather than engaged with more effective learning tools, and to the detriment of parents who have paid for a game which is not the effective tool it was represented to be.

## **Conclusion**

Faith Boninger, Ph.D., co-director of the Commercialism in Education Research Unit at the National Education Policy Center, University of Colorado Boulder, has opined to CCFC:

Prodigy may keep children quiet and happy while teachers or parents are busy, but it doesn't teach them math. Research indicates that kids must spend hours in the game to improve their math achievement scores by just one point. That might not be so terrible, perhaps, but during those hours they endure emotionally abusive marketing until they convince their parents to shell out money for a membership. Under a pretense of teaching math, Prodigy is using schools to access and manipulate a lucrative child market.

During this pandemic, schools and teachers are working overtime to educate children safely and effectively. Meanwhile, parents are anxious about impact the disruptions of the past year and eager to give their children any educational opportunities they can. Prodigy's deceptive marketing and manipulative tactics cut against all of these efforts, expose children to harm, and create and perpetuate inequities in learning.

We urge the FTC to investigate and take appropriate action to hold Prodigy Education accountable for its deception of educators and families, and to enjoin Prodigy from making deceptive claims or manipulative design to promote use of Prodigy and to sell premium memberships.

Respectfully submitted,

Campaign for a Commercial-Free Childhood

Badass Teachers Association

Berkeley Media Studies Group

Center for Digital Democracy

Center for Humane Technology

Consumer Action

Consumer Federation of America

Consumer Federation of California

Defending the Early Years

Electronic Privacy Information Center (EPIC)



Media Education Foundation

Network for Public Education

Obligation, Inc.

Open MIC (Open Media and Information Companies Initiative)

Parent Coalition for Student Privacy

Parents Television Council

ParentsTogether Foundation

Peace Educators Allied for Children Everywhere (P.E.A.C.E.)

Public Citizen

The Story of Stuff Project

TRUCE (Teachers Resisting Unhealthy Childhood Entertainment)

U.S. PIRG Education Fund