

Computer gaming programs can have numerous cognitive benefits including improving coordination, problem-solving skills, attention, and concentration, enhancing memory and multi-tasking skills, and provide stimulating learning challenges. As with any technology, limiting the amount of screen time is important.

Below are different computer games that teach various subject matter content to youth.

Math:

Motion Math: <https://motionmathgames.com/>

Motion math offers seven math games covering a variety of concepts.

- Recommended Grades: K-7
- Fee Associated: Yes
- Teacher Resources: Yes

Dragonbox Games: <https://dragonbox.com/>

Dragonbox Games offers a variety of games covering math concepts where students manipulate numbers and obtain a conceptual understanding of addition, subtraction, pre-algebra, algebra, and geometry.

- Recommended Grades: K-9
- Fee Associated: Yes
- Teacher Resources: Yes

Yogome: <https://yogome.com/>

Yogome offers more than 2,00 mini-games for students to develop a variety of skills.

- Recommended Grades: PK-5
- Fee Associated: Free & Paid Versions
- Teacher Resources: Yes

Mangahigh: <http://mangahigh.com>

Mangahigh offers a collection of games for students to compete in their math skills, earning badges and medals.

- Recommended Grades: K-10
- Fee Associated: Free & Paid Versions
- Teacher Resources: Yes

Lure of the Labyrinth: <https://labyrinth.thinkport.org/www/>

Lure of Labyrinth offers students an opportunity to solve problems, using pre-algebra, to save their pet and the world from monsters.

- Recommended Grades: 6-8
- Fee Associated: No
- Teacher Resources: Yes



Science:

Algodoo: <http://www.algodoo.com/>

Algodoo is a way to create, share, and remix interactives, virtual experiments, lessons, and demos that build conceptual understanding of physics.

- Recommended Grades: 4-12
- Fee Associated: Free on Mac/Windows (fee associated with iPad version)
- Teacher Resources: No

Tyto Online: <https://www.tytoonline.com>

Tyto online is platform allowing students to learn about concepts tied to the Next Generation Science Standards (NGSS) such as cells, genetics, and ecology.

- Recommended Grades: 6-8
- Fee Associated: Yes
- Teacher Resources: Yes

WolfQuest: <https://www.wolfquest.org/>

WolfQuest allows players to become a gray wolf in Yellowstone as they obtain a conceptual understanding of ecology.

- Recommended Grades: 6-12
- Fee Associated: Yes
- Teacher Resources: Yes

Foldit: <https://fold.it/>

Solve puzzles based on real protein folding that crowdsources scientific research and have led to breakthroughs.

- Recommended Grades: 9-12
- Fee Associated: No
- Teacher Resources: No

Civics & History:

iCivics: <https://icivics.org/>

iCivics is a suite of games founded by Justice Sandra Day O'Connor to help students engage in civics and US Government.

- Recommended Grades: 6-12
- Fee Associated: No
- Teacher Resources: Yes

Political Animals: <http://politicalanimalsgame.com/>

Political Animals is an election campaign simulation game set within a world populated by corrupt crocodiles and meritocratic mice.

- Recommended Grades: 8-12
- Fee Associated: Yes
- Teacher Resources: No



Attentat 1942: <http://attentat1942.com/>

Test your World War 2 history with Attentat 1942 as it tells the story of Nazi occupation through the eyes of the survivors. The game is built on personal memories, interactive comics, and authentic footage.

- Recommended Grades: 9-12
- Fee Associated: Yes
- Teacher Resources: Yes

Global Perspective:

Cloud Chasers - Journey of Hope: <http://cloudchasersgame.com/>

Cloud Chasers - A Journey of Hope allows players to guide a small family through five deadly deserts to reach the gateway to the world above the clouds as the conceptual understanding of migration and decision making.

- Recommended Grades: 5-12
- Fee Associated: Yes
- Teacher Resources: No

Never Alone: <http://neveralonegame.com/>

Players take on the roles of a young Inupiat girl named Nuna and her arctic fox companion as they set out to find the source of an endless blizzard that threatens the survival of everything she has ever known. Players will gain a conceptual understanding of culture.

- Recommended Grades: 8-12
- Fee Associated: Yes
- Teacher Resources: No

Ayiti: The Cost of Life: <https://www.tigweb.org/tiged/projects/ayiti/>

Ayiti challenges its players to manage a rural family of five in Haiti over four years. Players will gain a conceptual understanding of culture and global awareness.

- Recommended Grades: 6-8
- Fee Associated: No
- Teacher Resources: Yes

Coding:

CodeSpark Academy: <https://codespark.com/>

Set in the animated world of Foosville, where the character of the Glitch is wreaking havoc, the game offers scenes where players need to help the inhabitants achieve or solve something.

- Recommended Grades: K-5
- Fee Associated: No
- Teacher Resources: Yes

Human Resource Machine EDU: <https://www.filamentlearning.com/products/programming-and-automation-unit-human-resource-machine>

Human Resource Machine gives office workers the tasks of completing computer coding assignments given to them by their supervisors. As each task gets completed, the employee gets promoted and has more tasks that can be accomplished.



- Recommended Grades: 6-12
- Fee Associated: Yes
- Teacher Resources: No

Construct 3: <https://www.construct.net/en>

Construct 3 is a 2-D game engine that can be used to design and create your own games, such as puzzles, platformers, role-playing games, shooters, racing games, and even storybooks.

- Recommended Grades: 6-8
- Fee Associated: Free & Paid Versions
- Teacher Resources: No

Other:

Zoo U: <https://www.centervention.com/social-skills-game/>

Zoo U practices skills like empathy, managing feelings, self-control, and more.

- Recommended Grades: 2-4
- Fee Associated: Yes
- Teacher Resources: Yes

Ruby Rei: <https://fun.rubyrei.com/>

Ruby Rei is a perfect game for your English language learner. You get to play as a character who crash-landed on a forgotten planet, learning English as you explore.

- Recommended Grades: 2-12
- Fee Associated: Yes
- Teacher Resources: Yes

Epistory: <http://epistorygame.com/>

Epistory helps master your typing skills as you are immersed in a story where everything is to be written, ride a giant fox and fight insectile corruption in a beautiful origami world.

- Recommended Grades: 3-12
- Fee Associated: Yes
- Teacher Resources: No

Fake It to Make It: <https://www.fakeittomakeitgame.com/>

Fake It to Make It allows students to interact as a news “troll” and earn money by creating and planting fake news.

- Recommended Grades: 6-12
- Fee Associated: No
- Teacher Resources: No

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