## Free Web-Based Games for Grades 6-12

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**Spent** (Search "PlaySpent") -- A choose-your-own-adventure narrative where the player attempts to financially stay afloat for one month on a low-wage salary. See also **Payback** (Search "Time for Payback"), a similarly-designed game based on incurring student loan debt.

**Geoguessr** -- Using the Google Maps platform, the randomly-placed player must use visual clues to accurately pinpoint his/her location; the more expansive the player's knowledge of geography, language, topography, biology and architecture -- the better chance he or she has of being accurate.

**Freerice** -- Gamified in the sense that it encourages players to "level up" and rewards correct answers (to multiple choice questions in a wide array of subject matters) -- this is a great humanitarian site.

**Electrocity** -- A turn-based city-builder where the player must utilize and manage a multitude of energy sources in order to provide for an ever-growing urban population. Couple it with **Oiligarchy**, a turn-based tycoon game based on oil production from the 1950s on.

**Climway** -- A turn-based massive city manager game where the player must enact policies in order to lower GHG emissions within a 50 year span. See also **Windfall** and **Top Crop**.

**How the Market Works** -- A real-time stock market simulator, complete with great resources (links to *The Motley Fool, Investopedia*, and classroom assignments) as well as multiple investing capabilities (like investing in mutual funds, shorting stocks, etc).

**3rd World Farmer** -- A role-playing, turn-based game in which the player aims to provide for his family by growing crops and advancing technologically -- while battling the hardships of the 3rd world.

**The Undocumented** (Search "The Migrant Trail Game") -- A first-person, turn-based strategy game played from the perspective of either an undocumented immigrant or the border patrol, each embroiled in the dilemmas stemming from undocumented immigration.

**Mission US** -- A series of five first-person, choose-your-own adventure narratives set in distinct epochs of American history, where the player must navigate and understand the dynamics of that time period's experience.

**Fiscal Ship** -- A civics-oriented decision-making game where the player must (via enacting fiscal policies and legislation) take on the task of balancing the US budget by 2042, while simultaneously fulfilling an agenda he/she values.

**Grepolis** -- Massively Multiplayer Online Real-Time Strategy (MMORTS) game set in Ancient Greece, where the player must oversee and manage all facets of society and government while he/she attempts to expand from a humble polis to a metropolis. Other MMORTS: **Sparta: War of Empires** and **Forge of Empires** and **Pirates: Tides of Fortune** and **Campaign of 1863** and **Supremacy 1914** and **Call of War 1942**.

**Spitfire 1940** -- A turn-based strategy game set during the Battle of Britain, where the player must efficiently assign and manage new recruits in order to defeat the German Luftwaffe raids.

Couple it with Battle of Britain: 303 Squadron, a 3rd-person flight simulator from the same setting.

**Evolution Lab** -- A phylogenetics game, where the player must build and organize evolutionary trees dependent upon species' genetic similarities. Couple it with **Little Alchemy** or **The Blood Typing Game**.

**iCivics Games** -- A host of games that allow the player to engage in or simulate Civics processes. In **Executive Command**, the player takes on the role of president. In **Branches of Power**, the player tries to pass laws by employing all three branches of government. In **Argument Wars**, the player tries to argue and win famous Supreme Court cases. See also **Annenberg's That's Your Right** 

**Wordbuster** and **Scrabble Sprint** and **Clockwords** and **Wordtris** are all timed word/vocabulary games that engage the player's linguistic abilities.

**Duolingo** -- Language-learning gamified, scaffolded, and extensive.

**Frontier** (Search "Frontier Game") -- An adventure/tycoon game requiring trading and fighting in a fantasy/historical setting.

**The Redistricting Game** -- A strategy/role-playing game about gerrymandering, where the player must redraw voting districts in order to gain political advantage.

**Insurgo** -- A basic but addictive metal tower-building game whose underlying principles of physics, load-bearing stress, and wind factors.

**Quandary** (Search "Quandary Game") -- An ethics- and decision-based sci-fi game meant to explore societal dilemmas, whose complexity is derived from the many motives and personalities involved in any social fabric.

**Command and Control** -- A tower-defense (omniscient viewpoint) strategy game based on US military conflicts of the 1990s and 2000s; the player must manage resources and weaponry upgrades in order to have advantage over enemy combatants. \*\*Note: Violence\*\*

**Cargo Bridge 2** -- A physics and math game where the player is tasked with designing and testing bridges in increasingly difficult scenarios.

**Real Estate Fun** -- A basic house-flipping tycoon game, where the player must amass his/her fortune via strategically buying, renovating and selling properties. Couple it with **Mortgage Meltdown** and **Jane's Realty** and **Real Estate Empire 3** for added nuance.

**The Radix Endeavor** -- A role-playing, collaborative STEM-based game where the player explores a virtual world, solving mathematical and biological experiments.

**NYC Mafiosi** -- A Prohibition era tycoon/management game, where the player assumes the role of mobster attempting to take over NYC's boroughs via racketeering. \*\*Note: Violence, alcohol references and crime involved.\*\*

**Financial Entertainment Games** -- A host of games that employ and hone personal finance skills. **Farm Blitz** focuses on interest rates and debt; **Bite Club** focuses on retirement savings; **Celebrity Crush** focuses on credit; **Refund Rush** focuses on spending and investing tax refunds.

**Pandemic 2** -- A global real-time strategy game where the player attempts to infect the world's entire population with a deadly disease before a vaccine is discovered and distributed. The player must take into consideration geography, logistics, economy and population distribution -- while also considering the factors that increase the potency of the outbreak.

**Admongo** -- An adventure game created to teach young people advertising literacy, including how to interpret motive and methods.

**Catchment Detox** -- A turn-based strategy game that challenges the player to clean up river runoff (catchment) within a 100 year span, while still sustaining food production and financial wellbeing for the proximal communities.

**Fake It to Make It** -- A simulation-style game about fake news; the player creates a successively larger web platform attempting to spread misinformation, make money and sew discord, learning about the inner workings of these processes in real life. \*\*NOTE: Some topics depend on inflammatory rhetoric\*\*

**Code Fred: Survival Mode** -- An interactive anatomy and physiology game that allows the player to control the body's survival mechanisms, like delivering hemoglobin to muscles and proteins to important organs.

**Kahoot** (Search "Create Kahoot") -- A competitive, interactive, gamified multiple-choice platform with thousands of user-made quizzes, plus the ability to custom-make one's own. **Quizizz** is similar -- less of a collective competition but much more stylized and professional.

**Past/Present** (Search "Past Present Game") -- An interactive simulation set in 1906 in a fictitious mill town, offering a microcosm of the political, social and economic issues of that time (and ours as well).

## Sites to visit regularly:

- Games for Change
- Learn4good (Click "Games")
- Armor Games
- Larry Ferlazzo's Blog (Find "Learning Games" links)
- CoolMath Games
- Citizen Science Center

## Literature/Studies/Videos on GBL:

- <a href="http://www.iflscience.com/brain/computer-games-shown-improve-memory-and-neural-connectivity-child-ren/">http://www.iflscience.com/brain/computer-games-shown-improve-memory-and-neural-connectivity-child-ren/</a>
- http://www.joanganzcooneycenter.org/wp-content/uploads/2014/10/jgcc\_leveluplearning\_final.pdf
- <a href="https://www.researchgate.net/publication/242513283\_Digital\_Game\_Based\_LEARNING\_It%27s\_Not\_J">https://www.researchgate.net/publication/242513283\_Digital\_Game\_Based\_LEARNING\_It%27s\_Not\_J</a> ust the Digital Natives Who Are Restless

- https://www.youtube.com/watch?v=4aQAgAjTozk&t=302s
- https://www.sciencedirect.com/science/article/pii/S0360131513002224
- https://www.youtube.com/watch?v=O2N-5maKZ9Q
- https://www.youtube.com/watch?v=dE1DuBesGYM&t=182s
- https://www.sciencedirect.com/science/article/pii/S0360131508001954?via%3Dihub