How to...

Gamify

your classroom

By Ask a Tech Teacher

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Gamify Your Classroom

Vocabulary	Problem solving	Big Idea
• *Edugames* • *Gaming* • *Gamification* • *Learning style* • *Reach* • *Scaffolding* • *Simulation* • *Virtual* • *Virtual world*	• *How do I undo? (Ctrl+Z)* • *I'm not a gamer (pick a simulation for non-gamers)* • *I'm stuck (think creatively, critically. Work as a group)* • *I don't understand (be an explorer and risk-taker)* • *Someone on my team doesn't know how to play games (help him/her)*	*Technology differentiates education in surprising ways*
Time Required *90 minutes*	**NETS-S Standards** *1b, 2a*	**CCSS** *CCSS.Math.Practice.MP*

Essential Question

How can games lead to learning?

Overview

Materials

Internet, simulation links

Teacher Preparation
- Talk with classroom teacher so you tie games into their conversations
- Ensure that all required links are on lab computers

Steps

_____**Required skill level for this unit: Facility with internet. Online gaming background helpful but not necessary.**

_____What is '**Gamification' of education? Help students come up with** '*use of game design elements in educational contexts'. What are some favorites? Do they see connections between those games and education (do they learn while having fun)?*

_____Games offer what nothing else can. Through their virtual worlds, students have the opportunity to impact events around them with no prejudice based on youth. Properly-selected games invoke problem-solving, critical thinking, logical thinking, and collaboration—all significant skills in Common Core Standards, ISTE guidelines, and 21st Century classrooms.

_____Common Core alludes to skills gaming (and programming like Scratch and robotics) is known for, specifically (from Common Core Standards for Mathematical Practice):

- *Make sense of problems and persevere in solving them—Students must understand problem, how to solve it within the constructs of the game.*
- *Reason abstractly and quantitatively—students immerse themselves in game environment. This requires they understand what is occurring and process.*

- *Construct viable arguments and critique the reasoning of others—the nature of games requires students interact with other players to succeed. They must understand the goal and discern which characters within the game can assist in its completion.*
- *Model—games are models of a reality students likely will never experience.*
- *Use appropriate tools strategically—as with real life, there are only so many tools at a player's disposal. Determine what those are and how to use them to achieve goals.*
- *Look for and make use of structure—a map is good. Life works better with a plan.*
- *Look for and express regularity in repeated reasoning—learn the rules of the community. The ones that work can be repeated.*

_____*Give students opportunity to 'sell' you on using their favorite game for this unit. Let them gather in small groups, themed to a game, and discuss strategies for proving the efficacy of their game for unit purposes (see above bullet list).*
_____*Have students present their case to class:*

- *Discuss academic tie-ins—show game is more than just 'play'.*
- *Discuss student engagement, intellectual motivation, and academic reach (what does game touch; how does it appeal to different learning styles).*
- *How will control be exerted? Class must remain 'in control'.*
- *Provide citations to its effectiveness.*
- *Align selected game with standards discussed earlier in unit.*
- *Review its ease of use.*
- *Review its accessibility (do students require accounts? Are accounts free?)*
- *How much scaffolding is required for non-players?*
- *Does game encourage peer support?*

_____Students will work hard in this portion of the unit because success means they get to play their favorite game during class time (in their minds at least). This 20-30 minutes may be the most effective part of the unit.

Best Practices--Games

- *Plan time for a learning curve*
- *Have students work in groups*
- *Be actively involved*
- *Set behavioral expectations*
- *Pick great games*
- *Align goals with learning*
- *Scaffold non-gamers*
- *Update parents consistently*
- *Demo game-ed connections*
- *If possible, invite parents in*
- *Ignore unrealistic expectations on how quickly results populate*
- *Differentiate instruction*
- *Make failure fun*
- *Fit games into class schedules*
- *Expect students to play games in many locations*
- *Include varied assessments-- reflection, blogs, discussion boards*

_____When arguments are completed, 1) students vote on which games to use, 2) you assign/create groups, and then 3) students pick a game their group will play.

_____This list handles varied gaming levels of students. Include your own:

- _Bridge Builder_—learn how to design and test bridges
- _Coffee Shop_—run a coffee shop business
- _Electrocity_—how does electricity contribute to the growth of communities
- _iCivics_—experience what it means to be part of a democracy
- _Lemonade Stand_—run a lemonade stand business
- _Life_ (Insurance)—manage your life and see why insurance is important
- _Making History_: The Great War—WWI strategy game
- _MidWorld Online—learn French or Spanish while completing conquests_
- _Minecraft:_ (links to MinecraftEdu—fee required)
- _Mission US_—students role play the American Revolution or the Civil War
- _Past/Present_—life as an American immigrant in the early 1900's
- _Science simulations_—lots of choices at 7th grade level
- _Second Life_—simulates just about anything if you can find it
- _SimCity_—learn to run a city
- _SimTower_—learn to run a skyscraper as a business

Intentionally truncated for sample purposes

Other Singles from Structured Learning

- Bridge Building
- Debate
- Genius Hour
- Google Apps
- Khan Academy
- Service Learning
- Write an Ebook

SL Technology Books for Your Classroom
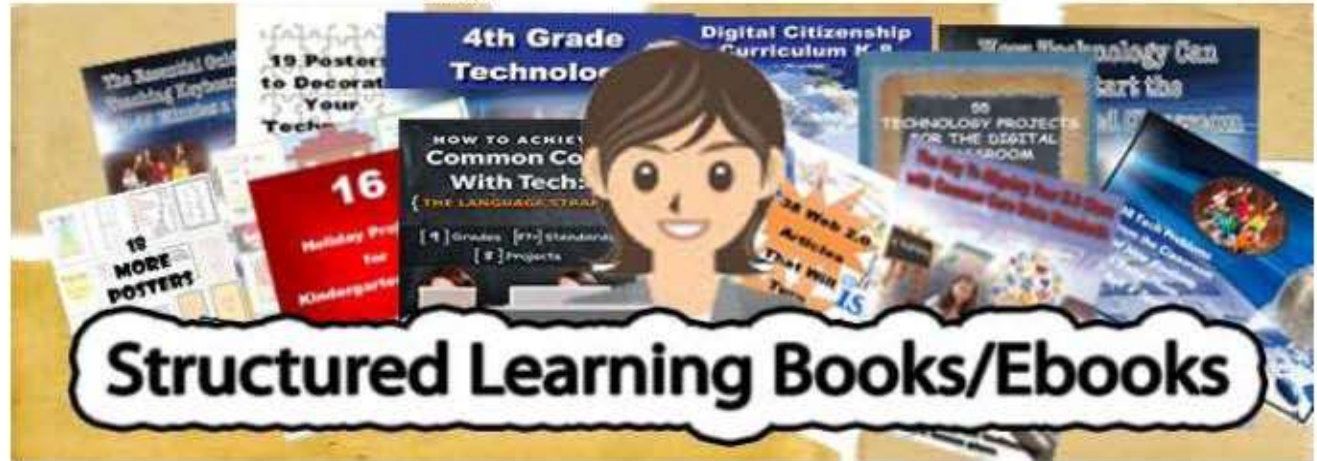
Structured Learning Books/Ebooks

Which book	Price (print/digital/Combo)	How Many
K-8th Tech Textbook (each)	$29.99-32.99/23.99-26.99/48.58-53.99+p&h	
K-6 Combo (all 7 textbooks)	$190.74/$153.84/$344.57 + p&h	
K-8 Combo (all 7 textbooks)	$246.52/$200.62/$447.14+ p&h	
35 More Projects for K-6	$31.99/25.99/52.18 + p&h	
55 Tech Projects—Vol I,II, Combo	$32.99 /$59.38—digital only (free shipping)	
K-8 Keyboard Curriculum	$29.95/25.95/50.31 + p&h	
K-8 Digital Citizenship Curriculum	$29.95/25.99/50.38 + p&h	
Common Core—Math, Lang., Read.	$26.99 ea/72.87 for 3—digi only (free ship'g)	
K-5 Common Core Projects	$29.95/23.99/48.55 + p&h	
16 Holiday Projects	$14.99 (digital only) + p&h	
19 Posters for the Tech Lab	$6.99 (digital only)	
18 More Posters for the Tech Lab	$12.99 (digital only)	
98 Tech Tips From Classroom	$9.99 (digital only) + p&h	
760+ Tech Ed Websites	$14.99 (digital only) + p&h	
Tech Ed Scope and Sequences	$14.99 (digital only) + p&h	
New Teacher Survival Kit (K-5)	$338.21/$287.85/$567.08+ p&h	
New Teacher Survival Kit (K-6)	$370.20/$314.84/$620.16 + p&h	
New Teacher Survival Kit (6-8)	$280.83/$261.83/$415.74 + p&h	
Bundles of lesson plans	$7.99 and up—digital only (free shipping)	
Mentoring (1 hr. at a time)	$50/hr	
Year-long tech curriculum help	$100 per year (online)	
Consulting/seminars/webinars	Call or email for prices	
	Total	

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