Heroes and Boss Baddies: Build your Own Video Game

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| **Program Title**  | Heroes and Boss Baddies: Build your Own Video Game |
| **Brief Description** | During this 90 minute program, participants will design and play a level of a videogame. Learn how to plot, storyboard, and build a platform videogame. |
| **Age Range** | Grades 3-7  |  |
| **Registration Required** | **Yes** |  |
| **Maximum Number of Participants** | 10 (number of kits) |
| **Literacy Connection** | Key messages:* Video games are another way to tell stories
* Designing games involves the type of logical thinking, problem solving, and testing needed for coding (and life!).

Digital literacy. Suggest book-related themes for the games. |
| **Estimated Costs** | None. Bloxels and iPads already owned by the library. |
| **Staffing / Training Requirements** | Recommended 2 librarians. Possible with 1 librarian, 1 support staff (for set-up and take-down). |
| **Equipment**  | Set of iPads (two totes, 15 iPads)* Bloxels app is on each iPad
* 15 Bloxels boards
* 4,800 blocks
* 10 laminated design guides
* 5 laminated character sample sheets
* 2 white background sheets
* Masking tape
* Brainstorming sheets
* Name tag supplies (stickers)
* Pencil crayons for designing the game on paper
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| **Space and Furniture** | Program room, or another area where the iPads and the very small plastic cubes can be contained.Set up tables around the room. Divide iPads and Bloxels boards across the tables. Dump a pile of Bloxels cubes in the middle of each table.If you use more than one table pushed together, use masking tape to cover the cracks so the blocks don’t fall through.Make sure it is easy to get from one table to another to hunt for cubes. |
| **More Information** | Bloxels website is here: <http://home.bloxelsbuilder.com/> |

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| **Step-by-Step Instructions** |
| **Before Program:*** Print storyboard pages (page 3, the 3 box template)
* Print brainstorming grids (page 2, the 16x16x1 grid)
* Play the default game to get familiar with the controls. This game starts automatically when you open the Bloxels app.
* Familiarise yourself with the Bloxels game building interface, esp. how to add art to blocks, how to edit characters and rooms

**Day of Program:**Set up each table with:* iPads
* Bloxels boards
* Bloxels cubes
* Design guides
* Pencil crayons
* Nametag stickers (if using)

**Program Outline:*** Get kids to make nametags as they arrive (optional)
* Welcome and introductions (5 min)
	+ Today we’re going to design and build a video game
* Play a game (5 min) Play the default sample game, it starts automatically when you start the bloxels app. Get kids to take the left set of stairs, there’s more opportunity to roam in that direction, they’ll get stuck quickly if they head to the right.
* Talk about how a game is made (heroes, items to collect, enemies) (10 min)
	+ Ask about games they know, maybe Mario Brothers?
	+ The hero is the main character who moves around the game.
	+ To win the game, the hero must:
		- Collect items, for example, coins, jewels
		- Kill enemies
		- Move from the start of the game to the end of the game
* Plan game on paper (5 min might need to use extra 5 minutes here?) Hand out storyboard pages and brainstorming grids
	+ Draw or describe your hero
	+ What will your hero have to collect?
	+ What does their world look like?
* Make a flat hero, no animation (15 mins)
	+ Show character sample sheets in case anyone wants to see one.
	+ Draw hero using blocks
	+ Capture using camera in Bloxels app
	+ Test your hero
* Make and test a room (30 mins)
	+ Heroes exist in a world, which is made up of:(Hand out laminated design guides) SHORTEN THIS SECTION if kids not interested.
		- Terrain, ground you can walk on, e.g. green grass, carpet, floor
		- Water, you can swim in it
		- Hazards, e.g. lava, spiky plants, these will kill you
		- Exploding blocks, you can shoot to break these
		- Story blocks, a place to use text to tell your story and to save your progress, so you can start again at that point instead of at the beginning
		- Coins, the thing you need to collect
		- Enemies
		- Power ups, which give you extra powers, for example, flying, weapons, changes in size
	+ Place the blocks
	+ Add art to the blocks
	+ Play the game using your hero
* Free Time, Closing Remarks (15 min)
	+ Add animation to the hero (one staff member can help kids who want to do this)
	+ Add more rooms (other staff member can help kids who want to do this)
	+ Play each other’s games, parents can come early to see them
	+ Explain how they can make a game at home, if they have a tablet.
* 5 minutes spillover time.
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