Technology configuration inventory

Name:	Adam Metz
Community & UN SDG(s):	Youth Learners/Gamers learning about Climate Change: SDG 13 - Climate Action, SDG 7 - Affordable and Clean Energy, SDG 12 - Responsible Consumption and Production
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Instructions

It is useful to inventory the current technology configuration of the community, i.e., the current technology that the people working, learning, advancing knowledge (etc.) in the specific area you are engineering software for are using, as a way to understand the community better and what matters to them better. If yours is a new community, it may not have any specific technology yet, but even for brand new communities, the current configuration may not be empty, for instance if general tools like email or phone are going to be used. You can use a version of the table on the next page to inventory and analyze the current configuration of your community:

1. Get the big picture. Research the area and make a list of all the platforms and stand-alone tools in your community's configuration as best you can
2. For each platform, list the tools and check the ones that are being used. Why are some not being used? Are there duplicates? Are there issues around integration between tools?
3. To the left, make a note of which community activities/orientations the tools currently support in your community
4. To the right, identify the key features of tools. Are some of these features commonly or rarely used? What are the reasons for that?
5. Assess actual tool use if you can. Identify which are dominant and which are only used by smaller groups and individuals.

NOTE: Add new rows as needed below. Please know your search should be as exhaustive as possible given the area you are researching

Platform	**NASA Climate Kids (https://climatekids.nasa.gov/)**		
Supported activities	**Tools**	**Key features**	**Usage notes**
Games	Web games that teach about the following topics: • Coral Bleaching • Greenhouse Gases • 'Climate Time Machine' • Ocean Currents • NASA Spacecrafts	Extremely simple Likely for kids in preschool->2nd grade	Very simple to use Little bit buggy in the browser at times, but not much of a problem
Reading	Various short and long readings accompanied by images	Learnings are explained very well (simple and covers all the basics, reader is not assumed to have any background knowledge in the topics)	Easy to navigate between readings

Videos	Various short videos (~1-3 minutes)	^ Learnings are explained very well (simple and covers all the basics, reader is not assumed to have any background knowledge in the topics)	Navigating from one video to another is quite easy, and related readings to the video are also shown alongside it
People (Green Careers)	Text readings	These readings help to inform the reader about careers at NASA that are making a positive impact against climate change	Each page includes an interview of a NASA employee, in text. Formatting isn't very consistent across pages.

Platform	**National Geographic Kids (https://kids.nationalgeographic.com/)**		
Supported activities	**Tools**	**Key features**	**Usage notes**
Games	Various web games related to all sorts of environmental topics: Jigsaw Puzzles Various 'action and adventure games'	Very simple games Likely for kids in preschool->2nd grade	Simple to use The UI is very intuitive and clear. Bright colours, big objects. Great for kids. One downside is the games aren't categorized by topic, they are all dumped into one group. As a kid I probably would have found that pretty distracting.
Videos	Various videos, some short some long (~1-10 minutes)	Simple videos made for kids	Easy to navigate, simply click the thumbnail of the video you want to watch.
Explore Mode	Images Readings Videos Experiments	Large amount links to images/readings/videos/experiments related to the topic the user chooses	Might be a bit too much information on one page at times. But overall the pages are pretty simple and easy to navigate for kids.

For each of the Stand-alone tools below, I've chosen a few games on https://games4sustainability.org/ which is a website for games developed around the UN SDGs

Stand-alone tool	**Once Upon a Tile** **https://games4sustainability.org/gamepedia/once-upon-a-tile/** **https://wearemuesli.itch.io/once-upon-a-tile**		
Supported activities	**Tool**	**Key features**	**Usage notes**
In this game, the player manages the resources, production, and growth, in an evolving civilization	Mobile/web game	The player manages the choices of developments that are made, such as clean energy options or transportation options. The gameplay moreso plays out similar to Candy Crush, or other games of the like, where you have to match up 3 or more of a tile/item in a row or column.	Easy to play once you get the hang of it, but a bit confusing at first. Simple controls and navigation of the UI

Stand-alone tool	**My 2050** **https://games4sustainability.org/gamepedia/my-2050/** **https://my2050.beis.gov.uk/?levers=111111111111111**		
Supported activities	**Tool**	**Key features**	**Usage notes**
In this game, the player manages choices of transportation, energy sources, heating, and more, to bring the city's greenhouse gas emissions to net zero.	Web game	The player uses sliders to manage how much 'ambition' is put towards different initiatives (i.e. solar power, public transport, carbon capture). The results are then simulated based on what the player chose for each slider, and it is determined whether the player's choices would have achieved net zero greenhouse gas emissions.	Very easy and intuitive to play for the most part. An important feature that wasn't too intuitive, was that each initiative can be clicked on which provides an educational pop-up related to that initiative.

Stand-alone tool	Windfall https://games4sustainability.org/gamepedia/windfall/ https://persuasivegames.com/game/windfall		
Supported activities	**Tool**	**Key features**	**Usage notes**
In this game, the player researches good locations for wind turbines and builds them.	Flash game (web game)	The player is given an energy offset goal to achieve, and they are building wind turbines to do so. The core focus of the game is for players to assess wind conditions, and possible disturbances of the wind turbine's location if it's too close to the public.	With this game being a flash game, it is not usable on most major web browsers, without the use of extensions, or going back to an old version of the browser. Intuitive and simple UI, didn't have any issues when playing the game.