

## Comparative Analysis

For my final project I am interested in creating an educational and fun interactive game about sorting waste on campus (especially what can be thrown in our compost bins around campus). Before I begin developing my own interface design, I researched comparable online games about composting or waste sorting.

The first interactive compost game I found was from the PBS Learning Media website and it was created by Keep America Beautiful, Inc. The game defines what compost is and describes key roles of soil microbes, oxygen, and moisture in the compost process. The main goal of the game is to challenge users to start and maintain their own virtual compost pile. At first glance, the interface has bright colors, bold typography, and is laid out in a grid similar to a comic book. This comic book aesthetic gave me the impression that the target audience is for children ages 8 and up. It's main menu features hover effects that either changes color of text or animates certain elements once you hover over an area with the cursor. Once you click play to start the game, a new window pops up with the game and you automatically hear squealing noises of a sick microbe character. The game also has another interactive component that plays certain audio when you click objects to go into the compost pile.

Overall my experience playing this game was decent. The game was not extremely fun, nor was it boring. I got a little frustrated when I first started playing the game because I was not quite sure how to make the soil microbes happy. This was my fault though because I was not interested in reading the long instructions and information before I started the game. When the game was over, I went back to read all the information and it made more sense. Therefore, there are some pros and cons to this interactive game. For the pros, there was good animation, a nice barometer to tell the status of how you are doing in the game, and informative content to learn about composting. However some cons are that the hints were confusing, it required a little too much reading, repetitive audio became annoying, and the aesthetic of the interface is outdated. Although this game has a lot of elements I disliked, I still think it was generally a decent and moderately fun game to learn about composting.

The second interactive game I found during my research is from the city of Palo Alto website. They have multiple online games that teach how to sort waste according to their city guidelines. One of their games that I played called

"Can-Tastic Smart Sorter" game is used to test how well students know what goes into recycling, garbage, and compost bins. The player has to sort items by dragging them into the correct bin.

Compared to the previous game provided by PBS, I enjoyed this game better. This game has a simpler interface, clear and concise instructions, and was easier to play in general. I felt more comfortable playing this game because I was not confused by awkward noises or ambiguous messages like in the PBS game. Also, I really enjoyed the easy drag and drop controls because it gives the real life sense of throwing waste in bins. There were a lot of pros for its interface design. One pro was that it had error messages if you incorrectly placed an object and messages if the object was successfully placed. These messages were color-coded (green for correct and red for incorrect) and enhanced the interaction design. Another pro is messages would pop up after a level was complete to tell how far along you are in the game. This status measurement is a nice feature in the interface design because it lets the user know where they are in the game. On the other hand there are a few cons. One con is that there are only 3 levels, so the game seems short. The second con is that the content in the game window is crowded together and could use white space to give the objects more breathing room. In all, "Can-Tastic Smart Sorter" game was simple, clear, and fun to play. I had the most fun playing this game rather than the PBS game because it was stress-free and easy to control.



## Keep America Beautiful game



## Bibliography

"Can-Tastic Smart Sorter | Palo Alto Zero Waste." *Can-Tastic Smart Sorter | Palo Alto Zero Waste*. N.p., n.d. Web. 29 Jan. 2016.

"Keep America Beautiful | Compost Office." *PBS LearningMedia*. N.p., n.d. Web. 29 Jan. 2016.