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PDI Studio V

Ethnography Report 2: Response Device

Introduction

The response device that our group (Fabian, Ben, Austin, and Rosalie) created was basically a ‘soundboard.’ It consisted of a main controller, an Arduino, 6 buttons, and a speaker. The buttons, in no particular order here, turned on the metronome, changed the beat of the metronome, played a Freak Out!, played a beat, changed the tone, and played the tone. We also made labels for each button that had a basic description of what it did, but some of the labels were wrong, which actually created some interesting results.

Hypothesis

I hypothesized that the students would try to make music with the soundboard that we had created. I think that if given the right tools, the students would automatically explore their options and start to create simple to high level music. I also think that they’ll enjoy playing around with the soundboard because of the type of buttons that we used, which, at least to us, were pleasurable to press repeatedly.

Results

During the time that we had at the Ark Community Charter School, we were able to interact with four groups.

For the first group, we told them what each button did, and told them to play around with it. At first, they didn’t try to make music until we showed them how to, and even then, it didn’t involve any sort of beat or rhythm. They also didn’t try to collaborate together until we had told them to. This suggests that having free range to do what they want is a hard concept to grasp, and having a direction helps. It reminds me a bit of how the video game Skyrim puts almost absolute freedom in a player’s hands, and my first interaction with the game had me lost and confused as to what to do. Although it seemed like they lost interest in the board, they still played around with it, and started to ask questions about how it was made, and that the controls and functions of it were cool. A reference to video games was made about the sounds, harking back to the last time we had visited and they mentioned video games as a large influence.

For the second and third groups, we told them that they had to figure out what each button did, and then tell us what they had found. The results this time were a lot more interesting, and had to do more with the physical appearance of our device. Because the opening for one of the buttons, a flip-switch, was wider in the horizontal direction, they kept trying to push it in that direction, even though it moved vertically. They thought that the speaker was a microphone, and kept telling each other to speak into it louder and louder. In our device, we had purposely made the max setting for one of the potentiometers a boring tone in order to counteract them keeping it at the max, and it actually worked out well. They also typically went for the obvious choice: the labels on the buttons. What was especially interesting was the fact that even though they figured out that the label was wrong, they still kept trying to go back to the function of the label, which suggests that visual aids are a lot more important than we thought. While all of them were trying to figure out the device, they kept pressing random buttons, and rarely worked together, but they were willing this time to allow others to try it out when they couldn’t figure it out. An unrelated but also interesting thing that happened was that when the device broke, they immediately disassociated themselves with it, and said that it wasn’t them, which shows a lack of ownership.

For the last group, we had told them the same thing we told the previous two groups to figure out what the buttons did, but we ended up telling them that it was a competition. They immediately got to trying to figure out what each button did, and they ended up doing it in a shorter time than the other groups. When they finished, they told us “Told you we could do it.” This time, we also showed them that they could make music, and this was the first group in which they actually tried to make music, and they started to talk about music such as hip hop, and that it wasn’t appropriate for school.

For all the groups, they all confused volume and frequency, suggesting a lack of vocabulary for describing what was going on around them, and they experimented with some of the exposed wires in our devices, saying that they had been shocked before. A surprising amount of students actually said this, which suggests at least a semi-dangerous environment at home. Although our hypothesis that they were going to make music was wrong, at least our thought that the buttons were pleasurable to press was correct, considering they kept pressing them even when they lost all interest in the sounds.