Marie Ferro Ethnography 3

November 5, 2012 PDI Studio VI

**Assignment**

Last time you added a hypothesis about how children will interact with your device. This time you should include a hypothesis about how children will learn with your device. Once again, whether or not your hypothesis correctly predicts is completely unimportant; the point is to gather information. The best prototype may be completely surprising.

Remember not to use the children’s real names. Please submit to me as softcopy -- include both your name and the assignment name in the file name; eg "smith ethnography 2" or some such.

**Introduction**

Just a quick note- I have switched groups since my last ethnographic piece. I am now working with Caroline and Lucas to develop an app for use with Apple devices. The device will ultimately assist children in learning parts of speech using pop music as a learning tool. The final goal is to create an application that allows children to listen to music while watching the phrases scroll across the screen. They will then be directed to pick out specific words and place them in the corresponding speech category (noun, verb, adjective etc.).

**Hypothesis**

In my experience both personally and in interacting with children of all ages and stages of education, I have learned that music is an extremely helpful tool to induce learning. Children tend to be much more engaged when they can relate what they are learning to a lyrical piece, especially one by an artist that they respect. This application will allow us to piggyback onto the music that the children are already exposed to and excited about on a daily basis. It also helps them to remember more information by providing a tool to connect the pieces of information. We believe that using songs that the children are already quite familiar with and attached to will help to motivate them to learn information that may otherwise be deemed boring or useless. Additionally, the song lyrics will provide context for the words which will give the students yet another way to remember the difference between the parts of speech and which type of words correspond with each category. The device will also help to retain the student’s attention which is another key factor in successfully being able to teach these new ideas and concepts.

**The Device**

The app that we brought to the school last week was only a partial mockup of our intended finished product. We had one song, Moment 4 Life by Nicki Minaj featuring Drake, and nine words for the students to place into three categories- Noun, Verb, and Adjective. The device also included a health bar to keep track of how well or poorly the students were doing. When the students lost all of their health a screen flashed “you lose” and the game restarted.

**Group Feedback/Field Testing**

We showed our mockup to four groups of fifth graders using iPads. We were also able to receive some feedback from teachers as well. Overall the majority of the feedback was positive with many students sighting areas that we were already aware of as those which needed to be improved upon. Our number one request was to increase the number of songs to choose from, which we fully plan to do with our next iteration.

**Group One**

Group one consisted of all males and was quite dynamic and rambunctious. We spent a few seconds explaining our application, but most of them were aware of our concept as they remembered the last time that the group came to the school. We made sure to hold onto the iPads while we were explaining so that the children would not become distracted by the technology. We learned last time that it is very important to create a leadership stature within the group to maintain order and composure with these new and intriguing devices. We needed two groups of two children each which the children easily broke into on their own. Additionally, to do some “market research”, we asked the students how many of them had iPads/iPhones in their household and most if not all said that they did have access to one of these products. This alleviated some of our concern surrounding the ability that they students would have to use the game at home. The initial reaction when we gave them each the iPad was to play around with the screen and find out what different functions they could use-without any instruction. Very quickly they learned that when they simply messed around, the health bar would go to zero and they would lose the game. They did find the “you lose” screen to be very entertaining and at some points in our test simply tried to mess with the other team’s iPad in order to make that screen show up. At other times the game turned into a race/competition to see who could complete all of the words the quickest. It was interesting to see that although we only had a few words and one song programed, the kids were able to make up their own games to play with these limited resources. The name of the app, Rap Star, definitely seemed to resonate with this group as well and they all made it known that they were quite into rap music and singers “oh, I know him!” (in reference to the artist) - another good sign!

Although the reception to the app was quite positive, we did receive some helpful feedback as well. The number one request was multiple songs and levels which is definitely a high priority for our group in the coming weeks. Through our observations we noticed a number of things, most important for this group of competitive souls was that we needed to design a better reaction for winning the game. Currently we have not coded anything to happen and the children are disappointed when they finish and do not receive any sort of congratulations or compensation. They mostly seem to want it to make a noise so that the other group knows that they have been beaten! We also observed that after a few times through the song, the kids began to memorize which words went into which category instead of actually understanding and learning the reasoning behind this. The competitive nature led them to find whatever tactic would allow them to complete the game the quickest. We need to create a barrier against this memorization. Perhaps we can change the placement of the words on the screen each time they try the level, or changing the color schemes/patterns etc.

**Group Two**

Our second group of test students juxtaposed the first quite well. This group had females in the mix and was much quieter and more reserved. We also questioned this group to determine their access to Apple products and found about half to have iPads/iPhones at their disposal. Instead of jumping right in and moving the words all over the screen just to see what would happen, this group was much more careful and apt to think about each word before moving anything. The personalities in this group were such that it would be nice to have some more subdued songs for those children that are not terribly into rap music. We certainly want to avoid any sort of stereotyping. From this group I came to the question of whether or not it would be beneficial to have this app somehow induce movement of some sort. I believe that it depends upon the context in which it is used, but after seeing the kids to quietly sitting I think that perhaps they would benefit from an app that induced even optional dancing of some sort. Seeing the children sitting so still and quietly made me think about how much they do this on a daily basis; it would be nice to combat this in some way with our application.

We received beneficial feedback from this group especially when it came to songs that they were interested in. They were quite vocal about what they like to listen to, even fighting over whether or not Justin Bieber was cool. We came to learn that there is a large mix of listening interest from Neyo to Shakira, and it is certainly not all rap. Additionally, we realized that putting the words “Alive, live, and life” all in the same grouping was too difficult for an introductory level. This will serve us much better as a final level as it was certainly challenging not just for this group but for all of the children. The words induced a lot of frustration especially if the students successfully placed 7/9 words and then lost the game just attempting to figure out what those last two words were.

**Group Three**

This group was probably the most positive of any that we had. They asked us if the game was an “app” because they wanted to go home and get it for their iPads. Additionally, they remembered our project very well from the last time that the group was there which led us to believe that they are already at least partially interested in grammar which made our job a bit easier to begin with. As with group two, about half of this group had access to Apple products as well. This group differed from the first two in that instead of immediately turning it into a competition between teams, one of the girls actually said “let’s just take turns”. They would rather be under less pressure to complete the game quickly in order to allow themselves more time to ensure that they were completing it correctly. This was refreshing to see and made it seem as though it might be beneficial to have a mode of game play not dictated by the clock. The purpose of the game is to make leaning the parts of speech fun the students and if creating a race does not do this then the students should be able to opt out of that feature.

**Group Four**

This group was the most difficult to obtain constructive feedback from. The dynamic was such that one child was extremely overpowering and loud which led me to believe that no matter what the other kids wanted to say, they were too intimidated by his mouth to really say anything. He basically told us over and over that it was “boring because there was only one song”. He also noted, and this was useful, that it would be more fun if it were and action game. While we will likely not incorporated guns and car racing as he suggested, it would be possible to add more action into the game play in order to better retain the attention spans of these students. In addition to the children in this group, we were also able to get some input from the fifth and sixth grade teachers. They were extremely positive and explained that a game such as this would fit in very well as a “center” if only they had the money to afford iPads. One teacher noted that she is constantly looking for ways to incorporate the smart board into her lesson plans so we may look into coding some sort of game of that nature. Additionally, we made sure to ask when the children are first exposed to parts of speech- first grade- to ensure that this was not a foreign topic for them.

**Conclusion**

It turned out that our hypothesis was largely correct- students seemed to enjoy learning what could be considered boring and trivial information significantly more when pop music was involved. We obtained much beneficial feedback from this trip and have a number of changes to make to our prototype before our final field test. Most importantly we need to incorporate a method to prevent straight memorization and instead ensure actual understanding of the parts of speech in the students. In the future it would be wonderful to work with the teachers at this school in order to obtain technology grants to purchase iPads for learning purposes such as these.



Notes from ACCS trip, 11/1/12

Group 1

* They like the “you lose” screen, find it amusing
* Most if not all said they had iPads/iPhones at home when questioned
* They all want more songs and levels though when asked what other songs they could not tell us
* The game needs to have a better “reaction” for winning, so that it is obvious that they have beat the game (though we knew this going in)
* Also need to make the words pop back when they are wrong, sometimes the kids are losing points just from touching the screen which was frustrating for them
* They seem to react positively to the name- “rap star”
* We also need to create a barrier against simply dragging and dropping/guessing. They seemed to be doing this a lot even though they knew that they might lose. Maybe some of our words were too difficult. Teacher said they learn this in 1st grade which is a while ago…
	+ We need them to KNOW the words, not just remember them (possibly changing colors and moving things around on the screen so that memorization would be a much harder technique to use
* Would be cool if, when they got a word wrong, it popped up with the context used in the song as a hint
* Need a shorter lose screen

Group 2

* This group was a littler shyer/quieter in personality, it would be nice to have some non-rap songs for children of this nature
* This group is much slower and thinks about their actions before actually moving the words. Therefore they beat the game with less tries
* We need to rework the score bar- the kids keep getting all the way to the end (with a high score) and then losing on one word often due to the touching factor.
* Songs/artists that they like (very vocal about this): Whistle, Nicki Minaj, Justin Bieber, Neyo, Snoop Dog, Beyonce, Shakira, Chris Brown, Trey Songz, Usher
* About half of this group has iPad/iPhone at home
* They are also memorizing and not necessarily understanding some of the words
* Is there any way to induce physical movement in this game? Maybe that is not something that we want…
* Life, Live, and Alive are very similar, too confusing. Should be reserved for a harder level

Group 3

* They all remember the last time the group came and the game that they brought so that means they must have liked it (since they didn’t say they remembered it because they hated it)
* This group seems to only have 1-2 members with Apple products
* “Let’s just takes turns”- in reference to the two person team, instead of working together because both wanted to do everything
* One method we tried when they were struggling- try getting all of on POS at once before moving onto the next.
* “This game is fun!”
* “Can I buy it for my iPad at home?” “Is it an app?”
* Again we have the issue of them memorizing instead of learning, it’s all about winning!
* The students and teachers think that it would make a good “center” (rotation) if they have the money to buy iPads…talked about technology grants…

Group 4

* Very harsh critics, one is definitely a joker
* Seems that their criticism is largely unfounded besides them wanting more levels and saying that it gets boring- which we already knew
* It seems that they were just getting bored of being in the room in general since it was almost time for their next class
* They say that it would be cooler if it had more action, was more like a video game
* They don’t feel challenged enough