

Data art project with senior art students (grade 11) – December 2016 to March 2017

The idea of creating a data art project was the culmination of several goals. I wanted my students to consider an interdisciplinary approach to art, and to have an experience in creating art outside of what they were used to. In carrying out this project, I wanted the students to be aware of their process and decision making and the visual impact of these on an audience.

In the fall of 2016, I proposed the idea to my colleague who at the time taught the second groups of senior art students. She jumped on board and let me spearhead the unit plan. I consulted with the senior science teacher to see if what I was asking of them would be attainable for students who were not currently in a science option (my students are a mixed group and Visual Arts is their mandatory Arts option). He concurred.

I started with showing the students multiple images of data artwork, as well as artists, videos and articles dealing with data art (reference 1 DA examples). We had a discussion as more examples were shown. They then set off in partners and I assigned each team a worksheet so they could work out what it was that they wanted to research.

This proved to be the most difficult part. What I was hoping they would come to on their own often started to veer towards my ideas instead of their own. This part of the project proved difficult for many of the students. To me there is a clear line between steering them towards formulating an idea and taking over the ship! There were students who had a very difficult time with finding topics to research on their own. “Start from what you know; what interests you?”, I kept repeating. I believe that a big hurdle stemmed from many students understanding this data art project to be more about science; they figured they needed to automatically deal with grand scientific theorems and were a bit discouraged when such ideas seemed too complicated to gather data from. Things turned around when students heard me give the go-ahead to a team asking if they could use data dealing with the amount of time they each spend on their phone. From there, other teams started to explore topics they were interested in: Missing and Murdered Indigenous Women; the Bechdel test in film (a measure of female representation); the trend of fur-trimmed winter jackets; how much recycling actually happens at the school; cosmetics companies still testing on animals; the effects of junk food, and the plight of honey bees in urban environments, among other ideas.

Once they had decided on their topics, each group was given a handout to flesh out their idea (reference 2 DA project worksheet and timeline). We went over the handout and what was expected. I decided to give them the constraint of gathering only quantitative type of data since qualitative was more difficult for them to understand at this stage. Most groups used the existing student body from all grade levels in order to gather their data, and my students were given permission to poll other students during class time in agreement with other teachers in advance. We came to an understanding of our timeline given our term’s constraints, and I held regular conferences with the groups during all of the stages of the project (gathering, and deciphering the data; then representing the data into a visual art piece), as they regularly adjusted their original ideas from the handout. Upon the completion of the studio component of the project, each group had to hand in a research process binder which had to include their collected data, further research on their topic and references used. They then gave an oral presentation explaining their process, findings and the artistic decisions they made in how they represented their data (reference 3 DA oral presentation). When all groups were done, each student was tasked with answering questions about one of the projects (reference DA 4 project reflection).

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Though I was mostly satisfied with the outcome, there emerged a few problems along the way:

- As mentioned above, several groups were unsure how to go about finding an appropriate topic; some groups initially copied existing ideas from the internet
- One group was caught falsifying their data because they did not manage their time and did not finish the polling stage, which led to safeguarding measures implemented for those groups who were using the student body to collect data.
- Some groups were using the first websites they encountered about a topic without checking legitimacy or cross referencing
- Some groups had issues with keeping track of their data so there were errors once converted into percentages
- Groups were able to represent their data easily enough, but the more difficult part was pushing the representation to an impactful level rather than a simple visual representation of very small numbers (polling 30 students on a topic for example).
- Some members of the groups did not do their lion's share of the work, but it was only made known to me at the end of the project
- All groups would have benefited from at least one more conference with the teacher, but they only have art class once a week for an hour. The time constraints were too tight for the thoroughness I was expecting.
- I needed additional meeting times with the science teacher in order to best convey a more adequate procedural process for quantitative data collecting. Another solution could be extending the deadline and having a class period dedicated to this where the science teacher offers a mini lesson. Or the science teacher and I could have created a short video as a reference which students could access regularly.

Here are some of the more successful group projects:

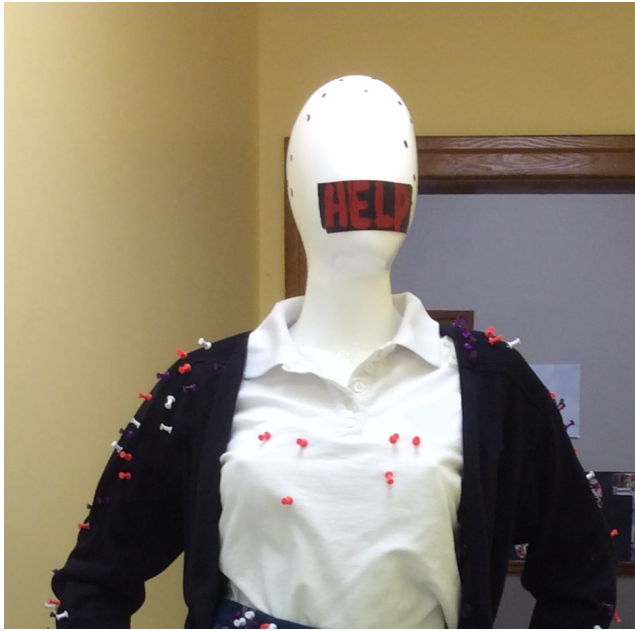
- One group monitored the time they spent on social media on their phone over the course of one week compared to what else they could have been doing during those hours. They represented their findings in the form of a clock. The clock was divided up like a pie chart with icons from each social media forming pie sections. Within the clock was another chart showcasing the other more productive activities they could have accomplished in the same amounts of time.



- One group enquired about the accuracy of the Bechdel test by polling junior students (grade 7) and senior students (grade 11). The team wanted to find out if the students' age had an effect on how they formed an opinion, and they wanted to see if students could use critical thinking to see whether women are portrayed positively or negatively in film. They polled students using some that failed the Bechdel test and portrayed women in a negative light according to the test. They found that more students in the junior grades agreed with the test but noticed that they did so almost blindly and by looking for affirmation from their peers in their voting. While fewer senior students agreed with some of the "failing" films on the list and debated with each other during the polling. They illustrated their findings by creating a movie camera made up of tow film reels constructed with DVDs and 35 mm film. The number of stills on the film reel represented the number of students agreeing with the Bechdel test. They also encased a plasticine brain in the movie camera showcasing their belief, due to their observation, that ultimately such guidelines like the Bechdel test are not as relevant as human debate.



- One group was inspired by an existing project the group found on Twitter (@cheezitfan1) done by a 19-year-old woman who decided to map out the places on her body where she had been touched by different people. The handprints were colour coded. The students decided to poll their female peers (grades 10 and 11) about unwanted physical contact while travelling to and from school on public transit while wearing their school uniform. The representation consisted of a clothing store mannequin wearing the school uniform. Three different coloured push pins were inserted onto the various body parts that the polled students outlined. The different coloured pins represented the different types of physical contact received: siblings/loved ones, friends, and danger/harasser.



- One group researched statistics on Murdered and Missing Indigenous Women in Canada in a ten-year span. They wanted to comment on how such cases are ignored by comparing the evidence to routine daily tasks. They chose to show their data by breaking CDs – a symbol the group chose to represent a daily activity as well a state of oblivion - into hundreds of sharp shards representing the number of MMWI. In the middle of the shards, one of the group members, a member of a First Nations community, made a beaded piece consisting of a female figure covered in a red blanket, with her head turned away, her hair flowing in the wind.
(I am waiting on an image from the former student)