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EDL 655

Week 2 Reflection

For this phase of the design thinking project, we carried out our information gathering procedures. From interviews to survey implementation, we sought to understand how diversity was viewed by students and teachers. We also sought to understand what, if any, trainings had been given to teachers in order to learn more about cultural understanding and differences. By collecting data, we also tried to see what areas of importance stood out the most to us. One example would be whether understanding of gender identity had been addressed or religious understanding had been sufficiently addressed. Religious understanding was one area that did stand out as not being sufficiently addressed (from preliminary results).

For this week, I created a survey for staff/teachers using survey monkey. The survey attempted to find out information on how accepting communities, individuals, or workplaces were of different religions, gender identities or cultures. The responses were on a scale of 'very accepting' to 'not accepting.' The survey asked teachers what types of trainings they had received in order to be understanding of the categories and trainings they had received to better teach students to be understanding of differences.

I believe that this week we faced similar challenges as the previous week, mostly revolving around coordination and meeting. Fortunately we were able to meet digitally using Google Hangouts and discuss what we wanted to discuss as well as complete our objects. I feel as though the fact that we will have to continue coordinating and adjusting our schedules will continue to be an issue. This will hold especially true for the teachers of my district that are also participating in the science grant trainings [either IDEAS and/or NGSS] such as me.

I am not sure if there is anything in particular that I would do to improve the whole process, everything went fairly smoothly and the whole group was able to communicate without any issues.

Finding and recording data is one of the processes that we have been learning about in our district science grant trainings. For the following school year I plan on having students use the iPads to record data on their individual experiments. They will then have to use that data to draw conclusions and only that data. While prior knowledge is useful in the first stage, data is what will determine how different variables affect the experiment. Students will have to be explicitly shown how to use data and how to draw conclusions, but it is a learning process that will lead to better critical thinkers.

I think the most important tenet of critical thinking during the data gathering process to follow is that of "Open mindedness." The reason being that we all have biases, whether individual or societal, and we have to try out best to keep them to ourselves. While data does need to be interpreted and that does require for use to draw on our experiences, we must do our best to not affect the data set itself or influence the data in any form. This will result in data sets that conflict with our original predictions or our individual beliefs. Part of critical thinking is being able to see the data for what it is and accepting it. We must then decide what the data means so that we can interpret in a meaningful way.