

The purpose of the focus group was to get feedback from teachers and students about a lesson related to the experimental design unit . The objective of the lesson was to simulate a clinical trial to investigate how medicines are tested. So, in this lesson 6 teachers participated in a taste test simulating a clinical trial of a medicine. Three of them were science teachers, one librarian and two art teachers. I taught the lesson to 7th graders at different levels of proficiency. They also provided me with feedback. In this taste test, the taste of a liquid(yellow lemonade without sugar) simulates the disease of an intense headache and another liquid simulates the medicine (pink lemonade with sugar). Participants were introduced to the concept of a placebo in a clinical trial when some of the clinical trial volunteers did not receive a medicine, but a placebo. Students data results clearly illustrated a placebo effect from their responses. It was not an expectation that students had in the beginning of the trial and were not made aware of from the beginning. It was surprising for them to find out that medicines are tested in this way. Afterwards, I showed them a youtube video on clinical trials tested in a part of Argentina. Students were able to visualize the outcome of the clinical trial and explore ethical issues of clinical trials in other countries. I chose this video because participants were of Spanish speaking descent and students could relate to, the video also provided subtitles in English.

Reaction of students- Some of the reactions to this activity and trends were unexpected in a positive way. Students were quite surprised and to a certain extend reactionary to the realities of subjects being in clinical trials. About 80% of them successfully learned the concepts of placebo, clinical trial, control group, and treatment groups from their responses to data. A hands-on simulation is a powerful tool to make students experiences about concepts more concrete and easy to understand. The collection of data was successful for all groups and the analysis of the data exemplified the concepts of placebo effect. One of the biggest challenges is the comparison of the placebo group to the treatment group from data collected. Students see

the success of the treatment group independent from the placebo group and not as a evaluation of the effectiveness of the medicine. I can support students by providing more scaffolding in reading data results and create different data scenarios to evaluate the effectiveness of other medicines in comparison to the treatment groups. After the hands on activity students were prepared to view real clinical trials, so I presented them with a documentary of a clinical trial in South America. Students were not discourage to react and voice out their concerns, but eventually I had to turn around their energy into a positive outcome. So guiding students to think about the knowledge they have gained, and how to react more productively is a challenge. As a teacher I had to allow students to dialogue and come up with suggestions on their own. One way that was agreed upon was to informed community about their learning. Eventually students understand that dialogue and educating themselves about topics that affect the community as a whole is important to everyone.

Reaction of teachers- Teachers reactions to the lesson were positive. Prior to the simulation of the testing of medicines, teachers completed a set of statements presented in the socrative app same as students. They were agree/disagree statements about placebo groups, clinical trials and informed consent. While teachers bring more expert prior knowledge to this activity, they felt it was an essential step in this lesson and reacted positively to the use of technology in this lesson. It took a little more time to guide them on the use of Socrative app but in the end some were interested in exploring and adapting it to their classes. Other teachers felt that a pre-assessment in a form of an anticipation guide will allow students to focus on the concepts, as well as, provide a point of reference for new vocabulary about to be learned as necessary steps before mastery. Teachers felt that real life experiences are always powerful for students, simulations in particular, are realistic and impact learning. They thought that directions were clear and development of activity was meaningful and that it target the objectives. Some of the

science teachers suggestions were to find related articles that support the understanding of clinical trials in a more scientific manner to clarify content and objectively assess the success of the lesson. Teachers felt that it was important for students to educate the community by providing information that they have learned during school events, such as report card pick up or Family Reading Night. They also suggested the importance of education as the basis for informed decision making. Teachers shared some concerns about interpretation of reading material, teachers feel that students will have problems understanding reading material and that when they do research on their own often students' presentations do not show a real depth of understanding, students present ideas too simplistically. As one teacher put it, the content they present might not show depth of understanding. I think that by the end of unit, when students are able to place all pieces together about experimental design it will clearly show if concepts were learned and if students are ready to apply what they have learned in their final projects.

Some of the changes I will need to make to my Dream IT will be more related to my leadership in the school. Presently I'm working in various projects and capacities. As a PPLC representative, I'm gathering teacher input on the type of professional development teachers will like to be involved in for the rest of the year. I'm creating a master plan that can be a source/model of reference for the upcoming years. Teachers are presently seeking opportunities to learn about the integration of technology since our classrooms are now equipped with iPads in every classroom. I'm also investing time on gathering a wish list of materials to support teacher growth and effectiveness in the classroom.

Also as Garden Chair, I'm in a position to make decisions that will impact the school based on a grant won by some of my colleagues this year, to enhance and upgrade the backyard including the garden.

Networking- I taken a leadership role and now I'm working with Neighboring high school Benito Juarez Culinary department to enhance and expose students to organic vegetables. Our garden will provide the organic vegetables to be used by culinary students and create delicious tastings for all students. We have successfully harvested 18 lbs of tomatoes and 20 lbs of watermelon that were served this past September in our cafeteria. It was a complete success.

I'm also working with Peggy Notebaert Museum as a Chicago Conservation Club leader and I'm running a service project with students after school. We recently completed a waste audit to find the amount of garbage we generate in the classrooms and cafeteria. Students will come up with a plan of action and project to minimize the waste at our school.

The DreamIt idea was to make science more relevant for my students, so that they think like scientists, feel like scientists, and act like scientists. A number of experiences can make this happen. Technology enhances my students learning everyday and makes learning more engaging, but in order for this to be successful I need to bring to my students meaningful experiences that affect their lives directly or indirectly everyday.