Engr 111: Reflections

Week 1

This week's reflection will not cover much. We got there to Luther Burbank and found parking very quickly. We were introduced to Ysenia who was very nice and introduced us to the task we will be doing for the next couple of weeks. She showed me around the maker lab which is a room with small wooden desks and lots of supplies. Some important information she told us was that the main demographic is 4th to 6th grade. The kids are primarily primary school students. We brainstormed ideas and talked about locations we can do activities. The school area seemed to remind me of my elementary school. Something interesting Ysenia said is that kids either choose to be in this STEM afterschool program or do sports. Most people would choose sports instead, so we have to be with kids sometimes who may not want to be there. It will be interesting challenge to work with them

Week2

We finally began interacting with kids this week with a lesson on designing paper airplanes by Jacob. While he was giving the overall lecture the rest of us split up and helped everyone on their airplanes and helped them fold if they needed it. Many kids were quiet, but there were also many really loud kids who loved to talk. They learned very quickly and we went outside and tested them in the wind to see how far they would need to go. I felt that the relaxed nature of the entire lesson plane was really fun for the kids which made me think about my own lesson plan and how complex it seemed. I may need to make changes to my lesson plan to make it more consumable for the kids. They seem to learn quickly. After about 90 minutes, most of the kids were eager to start their homework. I helped some of them with it, but most of them seemed very bright and worked on it very effectively. This week was very relaxed and there didn’t seem to be any problems. Hopefully, the other weeks are this smooth.

Week 3

This week we started on the next lesson plan led by Liam. He introduced the idea of saving astronauts and how it relates to the egg drop physics challenge by showing a clip from a movie. He explained the rules of the challenge and what you can do to make sure your egg is protected. Everyone got an egg and they began to work. I was paired with a group of kids who were initially quiet, but during the project they worked very well together in Spanish. Liam also spoke with them in Spanish and helped them workin making better ideas like a parachute. I only could understand and speak a couple phrases, but it was a fun experience learning a little Spanish from them. The two kids I was with both created a carrier to save the egg from cracking and the afternoon was well spent.

Week 4:

Showtime. It was my turn to lead a lesson. I didn't have much to prepare, but I made some easy to understand slides and got some marbles a couple hours earlier. I started off the lesson with the idea of the engineering design process. Then, I showed them a video of what we were trying to build. The kids were really receptive and found it really interesting. When we started the design process, they all had unique designs. Some of them defied physics, but we worked with them to create cool courses. Then, we built the design that they drew in the design phase. They used tape and also sticks on top of paper. Finally, we used the marbles I got and sent them down a ramp. The kids tweaked them a little to see if the courses could make the marbles race take different more unique paths. I think the day was fun and I loved seeing the kids creativity awaken.

Week 5:

I think this week we struggled harder than most weeks. Due to lower numbers of students, we got a new batch of kids from the third grade class who were very high energy. We also had an activity that required much planning, but most of them started building right away. The goal of the activity was to build paper bridges that could hold weight. We had a pound in weight that they would try to support. The successful bridges just tended to overuse resources

like paper and tape to achieve their goal. There was one group that made something with moderate resources that could hold a lot of weight. Most of the kids had a hard time staying on task and would use this time to do other things which were more interesting to them. Some of the kids were not as challenged as they finished quickly and it was really no problem for them. This week was just hard to keep the kids on task.

Week 6:

None