**NEEDS ASSESSMENT**

**Three to five student needs related to specific curricula:**

* My students need to be exposed to science in a non-traditional way-while still maintaining the information & increased rigor.
* Students need to understand how to question & think like a scientist.
* Students learn from hands on activities and labs.
* My students have to be able to view science in the bigger picture and the role that El Paso plays in the larger scheme of things.

**Three to five changes you would like to make to your teaching methods:**

* I need to be able to allow my students to think on their own & give them the time to process the information. Their attention span is in bursts and they must be able to start thinking on their own-instead of being fed information. My role will be to support their learning.
* Increase specific roles for students. This will hold them accountable for their specific role & they can be held to the same standard as a researcher. Ex. Lab tech, researcher, supervisor, and Head Principal Investigator (PI).
* Plan & implement specific goals for the class to enhance learning.
* Increase the use and exposure to technology: GIS, time-lapsed cameras, remote sensing, and basic statistics (Excel).

**Three to five things you expect to learn during your experience**

* Since I have been in graduate school-I have realized that the technology has changed A LOT in the last 8 years. Getting refresher courses in the lab and sampling techniques. I hope to learn new ways to implement new techniques in the class.
* Greening is a new way that allows scientists to use technology to see the amount of photosynthesis taking place and giving insight to carbon flux. Students need to be able to see the important role that carbon has on our ever-changing planet.
* The role that native cultures play in science and how researchers collaborate with these cultures to enhance their communities.

**Three to five concepts you would like to teach “better” or differently**

* I have never taught Environmental Science and I am nervous and excited about getting students excited about the environment.
* I am teaching the whole year differently-I am coming up with projects to allow students to see how what is happening in the Arctic is affecting us in the desert.
* Even though-I have taught biology in some way for almost 8 years-this year will be different-but exciting! At the same time making sure to cover all of the Texas Standards (TEKs).

**Equity and expectations related to ethnicity, gender, socioeconomic, and differently-abled**

Research Opportunities in the Arctic for Minorities says it all. The lack of diversity in ecology and in the Arctic specifically is something that I am hoping to change. Students need to see that traveling the world is something attainable. They can change the face of scientists. In a time-where diversity is unwelcomed-students need to be able to be that change. Female scientists are few and Chicano scientists are even less. Almost 90% of our schools is economically disadvantaged, and many have not left El Paso or even think that they can leave El Paso. Even if it is through their teacher-by being exposed to something that is different can be life changing for these students.