**Classroom Vision:**

 Science is fun and exciting and even mind-blowing at times. As science-lovers, many teachers and researchers already know this; Why is it that many students don’t? I want students to realize the wonders of science and the direct affect it has on their lives. I seek a classroom environment that involves a variety of theoretical science coupled with hands-on investigations that results in authentic experiments that children will learn from.

**Professional Goals:**

 This school year, I will be teaching students in Indiana that have no knowledge of polar climates or polar changes that are currently happening. I hope to change this by incorporating lessons that require collaboration with Travis Gottlin, the upcoming science teacher in Nenana, Alaska. I would like to use the internet program *CollaborateClassroom* to make one-on-one communication for our students possible.

I have a love for film that I would like to capture with PolarTrec and bring to the classroom. Many young minds respond well to visual stimulants. For this reason, I plan to record ***many*** short clips that will be turned into classroom videos that help inform students about the scientific method, climate change, Mapping, and the geology of the North Slope.

**Obstacles:**

 Science standards in Indiana are long and arduous and it can be difficult to build in “extra” curriculum that does not pertain to the local Indiana environment. Though some may regard polar science as locally unimportant information, it is a great chance to help students understand their role in the world as global citizens.

 Another obstacle will be in collaborating with the classroom in Nenana, Alaska. New technologies and websites like *CollaborateClassroom* make it easier, but it is still a process that requires a lot of time and energy, and will be made more difficult by time differences and internet accessibility.

**Student Needs:**

 As an avid traveler, I love to bring the science from foreign places into the classroom. The experience in Barrow will help me incorporate new polar knowledge into Earth Science lessons. I anticipate that this experience will provide for me a better understanding of the following classroom concepts that students will learn about in class:

Environmental:

* Global interconnectedness and how it affects climate change.
* Local affects of climate change. How does it affect *our* community?
* Have students conduct their own interviews with parents, relatives, friends, in the community regarding the historical ecology of Logansport, Indiana.

Oceanography:

* Understanding the ocean’s role and how it affects coastal communities.
* The affects that global climate change has on the ocean life, sea-level, and ultimately humans.

Cryosphere:

* What is it? How does it affect the locals, land, ocean, and atmosphere?

 Apart from typical Earth Science curriculum, students will hopefully be able to assess the risks that come with living in any location, including our town of Logansport. There is a Teen CERT program in our county that I would like to contact about training with local students.

**New Classroom Strategies:**

 This is a neat opportunity to study the changing arctic *primarily* because the researcher’s main goal is to outreach to students. I expect to speak with Anne Garland much about her work and try to understand her methods in working with Teen CERT. In doing so, I can hopefully take her methods and slightly reshape them to fit my needs and student’s needs in the classroom.

 I expect this will include more collaboration in the classroom environment, extending out beyond the school walls and to other communities.

**Expectations Related to Ethnicity, Gender, Socioeconomic, and Students with Different Abilities:**

 With 18,000 people, the community that I teach in is primarily Caucasian but has a large population of Hispanics, at 22%. Each classroom lesson I prepare works closely with the ENL (English as a New Language) staff in order to prepare all materials in Spanish as well as English. I think this experience will be neat for all students of all ethnicities because it is assessing risk factors in a community. It may be especially special for the minority students that see that this project involves many Native American communities.