Published in the International Journal of Science Education on January 23, 2004 is an article titled, *Constraints Experienced by Beginning Secondary Science Teachers in Implementing Scientific Inquiry Lesson*. Gillian H. Roehrig and Julie A. Luft selected fourteen beginning secondary science teachers enrolled in the program, Alternative Support for Induction science Teachers (ASIST), and observed their classrooms throughout the school year. The study questioned what influenced the implementation of scientific inquiry lessons. Data were collected on the teachers’ content knowledge, views on the nature of science, teaching beliefs, and pedagogical knowledge. At the end of the study, they concluded that none of the above factors independently worked but collaboratively shaped the teachers’ instruction of science as inquiry.

The article did not describe the selection process of the fourteen teachers. At the least, the group was not random. Since these teachers had in one way or another enrolled themselves in the support program, there was already a biased selection. Not only were they not the average Joes, but the small size skewed the universality of the findings. There was not enough information on the demographics of the students or the schools. The report simply left out all the outside the classroom factors and focused only on the teachers. Nonetheless, I received valuable points from the reading.
Roehrig and Luft categorized the teachers as “inquiry teachers”, “process-oriented teachers”, and “traditional teachers.” As I read through the article, I asked myself where I fit in. I know I still have a lot of room for improvement. I wonder if I could be each of the three throughout the course of the year, the unit, or the class period. If the ASIST staff had come to observe me, what would they see? I recently had my administrators come observe me teach, and they were pleased with what they saw. I do not actually know what they looked for, but I was apparently “amazing” and “excellent” in their eyes. I am not sure though.

More often than not, I would fall into the category of a “traditional teacher.” Rarely, I let my students design their own experiments. Looking at the list of possible constraints, my fears attribute to my strong teacher-centered classroom management. If I let go of the comfort of the structure, I would not know what to expect. As a relatively new teacher, there is already so much on my plate. I lack the pedagogical knowledge and the overall experience to know what student misconceptions to anticipate and how they can overcome the frustration.

What exactly is the nature of science? I do not know if I could confidently answer the question. The article refers to the “contemporary” view and the “traditional” view. Apparently, all the teachers I had in school held the latter. I know a lot of them are still teaching in the same way I have been taught. Before I plan another lesson, I first need to ask myself what I believe is important for the
students to learn aside from transmitting the factual information listed in the state content standards,