(a) Over the past two years of teaching Project Lead the Way and computer literacy, I often reflect on how effective my teaching strategies are and if my students are developing new skills and enhancing their old skills. I also find myself trying to make real-world connections whether it be with careers or how technological skills are used in society and this is an area that I am currently trying to improve. Technology and society both affect the world around us and I need to improve on how to present and implement this connection in my lessons. For example, we focus on keyboard skills for a small unit and we examine careers that use keyboarding skills daily, but we could examine exactly how they use them.

Connecting technology with other fields of studies is an important tenet of the Standard of Technological Literacy and Project Lead the Way. Trying to incorporate all of the content areas in the lesson can be difficult when dealing with my curriculum, but I try to include one other content area per lesson. For instance, when the students are learning about digital citizenship, the students will read a Newsela article (the article difficulty is aligned with their Lexile level that I receive from the Language Arts teacher) about what age kids should be able to get cell phone and then we have a Socratic discussion about the main question.

Being technologically literate is an important role and characteristic in our society today. In my classroom, students are taught about digital citizenship, how to become a better typer, understand and perform better using Google Apps, and the basics of computer science. Students are required to complete a traveling project during the semester. During this, students use Google Earth to figure out a location, Google Sheets for completing a budget, Google Slides about the journey, and Google Docs to create a brochure of the location. This helps the students understand just how different Google Apps are used in different occupations.

(b) One of the biggest challenges that I have faced in my teaching career is stepping out of my comfort zone in order to try new lessons, assessments, and projects. Based on Appendix H, a big part of science is "wondering, investigating, questioning, data collecting, and analyzing" and if I were to take this approach when developing lessons and units, I could dispose my mindset of trying new lessons and let the data speak for itself (NGSS Release, 2013). This could enhance the way I integrate other disciplines into my lesson plans.

Another way that I could enhance my teaching to address the tenets outlined in Appendix H is my having the students formulate more claims and arguments. I believe this would help me to incorporate reading and writing into my discipline and will help students understand the importance of finding evidence to back up their claim. This could help them with primary documents in history class, making scientific claims in science, and help students understand programming better in my own classroom.

When the phrase "nature of" is present, I think about the characteristics that make up that nature. I think of the qualities and purpose of that nature. To say that the "nature of" is dynamic, is to say that it can and will actively change through new investigative findings. In my current field, the nature of technology is constantly changing through new findings and the development of new technologies and software. The nature of technology has been dynamic since the dawn of times due to new technologies being developed. With the phrase "nature of," it requires educators to be flexible and responsive to change. If we can understand the "nature of" a discipline, it will help us perform better as educators and will allow us to further educate our students

(c) The great thing about technology is that it can be integrated into any subject matter. It is very often said and implied that technology and science can be substituted for one another. One way that the nature of technology and the nature of science overlap is that technology is the application of science. There are times when new knowledge from science leads to the development of new technology and vice versa. Both science and technology are dependent on each other for their own growth and development.

A second way that science and technology overlap is that both content areas use processes to achieve their goals. For example, science achieves their goals through the scientific process while technology achieves its goals through the technological process. Both of these processes allow people to investigate problems, collect data, and develop conclusions. Most importantly though, it helps people learn new content.

Innovation is a third way that these contents overlap. Innovation encourages students in both content areas to look at problems critically and try to solve them. This will help students use their creativity skills to discover new information. Also, we can use technology and science to help students understand the engineering design and process. This can help students explore and discover new careers that might interest them.