Tosha Kelsey
Math 5010
September 12, 2016

Reflection 2

Summary and Discussion of Main Points

This article was about the way that using technology in the classroom empowers students mathematically, the roles of technology in the classroom, and teachers are better prepared for teaching when they are trained in using technology.

Reflection/Implications for my teaching

As I read through this article, I found it very helpful. I particularly liked the part about the constructivist learning theory, which is the idea of students actively construct their own knowledge. Technology is a great resource in helping students discover relationships, and figure out the reason behind formulas on their own. I found that to be my own experience in Modern Geometry with Geogebra.

I never realized the implications that students would be able to approach and understand material that would have been presented in later classes with the use of technology. In my experience, I didn't do any optimization problems until I was in Calculus, but as the article pointed out, we can teach students optimization with graphing calculators. We don't need to teach them all of the mathematics behind it right up front for them to understand the idea but seeing a visual. After they understand the idea, we can teach them the mathematics and it should be easier to understand.

Another part of this article that I found particularly applicable is that using technology encourages students to use precise language. In coding computers or inputting formulas, equations and expressions into a calculator, you have to be precise. You have to make sure that you say exactly what you mean. It helps the students become better at using literal language. I think that using literal language is one of the most important aspects of learning, speaking and applying mathematics.

Another aspect of this article that I enjoyed was when the point of technology aiding in mathematical problem solving was discussed. I know that a lot of people think of mathematics as just computation and arithmetic. But in using technology in the classroom, we are able to help the students focus on the process instead of the computation, as well as solving realistic problems and developing mathematical skills. In using technology, the students can focus on how to solve a problem and think about it more abstractly rather than worrying about not making any arithmetic or computational errors and getting the right answer.

Response to prompts

Which of the function of technology discussed in the articles have you had experience with in a math class? How did they contribute to your learning?

The only technology that I can think of that I have had experience with in a classroom is Geogebra. It helped me model things in geometry that I wouldn't have

been able to otherwise. I learned a lot about different things from experimenting with the technology and discovering relationships by myself. I felt more accomplished and I felt like I understood it better than I would have otherwise. I don't know how much personal meaning I would have put with different theorems and whatnot if I hadn't discovered it on my own.

Which of the functions of technology discussed do you find the most compelling, why?

The function of technology that I find most compelling was the 'enhanced ability to focus on the process of problem solving instead of the computational aspect' as I stated above in the last paragraph. I think that technology can be and is a great way to open door for our students to think about math in a way that they haven't before. It's not about computation, it's about the ideas.

Comments/questions for class discussion

Where is the balance of using technology in the classroom?

I want to share in class about my thoughts on the function that I find most compelling as I stated above because I feel like it is important.