ETEC 533-Theoretical Reflection Paper Written by Stefani Oakes ETEC 533-65A- University of British Columbia Master of Educational Technology Program

## **Group 3- Transfer of Learning**

Although I did not know many of the specific terms that were used in the video, I was familiar with the concept of transfer of learning mainly in regard to the processing that needs to take place in order to transfer information from our short term memory into our long term memory. I also knew that the transfer of knowledge can be facilitated by certain strategies and practices that allow for better retention and retrieval of information at a later date. This relates to me as an educator, as I am always seeking ways to enhance my students' learning opportunities. Learning more about this topic may help me to better meet the needs of my students who struggle with knowledge transfer.

Something that I learned from the presentation was that educators need to be cautious about attaching too much context to a concept. I always try to provide my students with enough context to make the learning relevant to 'real life' situations in order to make them see the value in the learning, while also situating their learning with some background knowledge. I now know that I need to be more thorough in providing my students with a variety of contexts, so that they can more readily transfer the knowledge and then apply it effectively in numerous situations in the future.

Something that I would like to know that was not answered by the presentation was how teachers can explicitly teach skills to students that will enable them to be better able to transfer their knowledge beyond accessing prior knowledge and making learning meaningful. Can I hone these skills more explicitly or directly with my learners? I liked the way in which the presentation was laid out. The sequence of information was well thought out as earlier concepts in the video helped me to get more out of concepts discussed later on within it. I also thought that it was advantageous to conclude with some gamification elements, as I see huge potential in

learning games aiding transfer of knowledge for students. A point of improvement may have been to be a bit clearer on the differences between low/near and high/far transfer of knowledge, as this was something new to me and I was not sure that I grasped it fully from what was shared.

### Group 4- Exploring the Process of Learning Math and Science

Much of this presentation was a good review of the various learning theories which I was already familiar with from past courses during both my Bachelor of Education, as well as my MET studies. This topic applies to me and all educators, as learning theories should directly relate to our practices in the classroom. I personally feel that a blend of various learning theories works best for me when I am shaping my learning environment for my students, as there are benefits and drawbacks to all of them.

Something that I learned from this presentation were the terms incremental and entity theorists, connectivism and also the notion of fixed and growth mindsets. The work of Carol Dweck was very intriguing and I most definitely need to invest some time into finding out more about this in the future. Although not a criticism of the presentation, I would have liked to have learned more about all of the above mentioned concepts. I felt like I just got a small taste of each when I was looking for a full meal. This connects to my point of improvement. It would have been great to have had additional time to dig more deeply into these ideas, but with only 15 minutes of time to work with, we were restricted to a small sampling of the broader topic.

### Group 5- Meeting the Needs of Math and Science Learners for the 21<sup>st</sup> Century

I was able to relate to this entire presentation. The tale of Mr. Smith is a common one in schools today. There are teachers that are already diving into new technologies with their

learners, while others flatly refuse and then there are those educators who know that they could be changing their practice for the better, but are not sure how to get started. I was already familiar with much of the presentation content, however having it all presented in such a well thought out and relevant way was really advantageous.

As I was familiar with virtually all of the content, my new learning from this presentation actually came from one of the tools that the group used to create some of their images in the video; emaze. I was intrigued by this new tool and spent some time looking into it as a result. One of my suggestions to possibly consider would be creating the various supporting graphics in the same (or more similar) platforms, as there was quite a jarring difference between the picture quality of some of the graphics. Some of the images containing text seemed out of focus and were challenging to read, although the voice over provided the same content so nothing was really lost.

# Group 6- Effective Science and Mathematics Education: Planning, Teaching and Assessment

As I am currently completing courses seven and eight in the MET program, this presentation contained content that was familiar. I appreciated the review of the various types of learning environments and strategies to help educators develop effective learning environments for their pupils. I think that the emphasis placed upon the importance of socially constructed learning grounded in meaningful problems and collaborative solutions was notable. This is such an important consideration for educators today.

Something from the presentation that was new to me, was the Stanford recommendations and the idea of educators 'looping' with their students. I think that this is a very interesting idea

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and I hope that at some point in my career I am able to try it out myself. I can only imagine the benefits of having already spent a year getting to know a child's learning strengths, weaknesses, learning style and personality and then being able to start a school year with a close relationship already well established. I would think that we would be able to take our learners much farther without having to spend the extra time getting to know our learners in the fall.

One of my own personal struggles is that students are coming from so many different backgrounds and their home environments are anything but consistent; it is so difficult to accommodate for these variances. I wish that there would have been some tips provided in the video in regard to how to level the playing field, so that our learners that come from supportive homes and those that do not, still have the same chance of success. This is undoubtedly a problem too big to address in a presentation such as this, and there may be no realistic answer to it anyway. It was just a thought that came to me while viewing the presentation. A possible suggestion for improvement would be to include Canadian statistics within the presentation, as many of us are teaching in Canadian schools.

### **Group 7- Exploring Teacher Education in Science and Math**

Much of the content of this presentation was all too familiar to me, especially as an educator in B.C. who has just gone through long term job action that eventually resulted in a strike. I already knew that one of the biggest factors in student success is an effective teacher, which makes it all the more frustrating for those of us in educational roles that are underfunded and inadequately trained. The wealth of comments from my classmates and the stories of their own educational experiences, mentorships (or lack thereof) and ongoing professional development concerns indicates just how relevant this issue is for many teachers.

The thing that I learned from this presentation was that the problems in these areas extend beyond my own school district and province too. We tend to stay in our own professional circles and prior to entering the MET program, my own circle did not extend beyond my own district. It was interesting to note from both the presentation and the accompanying discourse among my classmates that things are far from being standardized or equitable in regard to teacher preparation, resource allocation, and professional development opportunities.

What I would have liked to have known from the presentation (although there were great contributions made in this area from the discussion that came out of the presentation) were some 'take away' ideas to make the best of the opportunities that we do have available to us such as the 'Speed Geeking' and 'TTT' (Teachers Teaching Teachers) professional development ideas that were suggested by a few classmates. This is also my suggestion for improvement; it would have been nice to have had some more specific examples beyond the idea of professional leaning communities to help us see some potential solutions to these problems.