# Annotated Transcript

## Fall 2014

*TE 831* Teaching School Subject Matter with Technology Dr. Doug Hartman

*TE 861B* Inquiry, Nature of Science Dr. Sarah Stapleton

### Spring 2015

ED 800 Concepts Educational Inquiry Dr. Steven Weiland This course was my first introduction to the concept of TPACK (Technological Pedagogical and Content Knowledge Theory). It helped me to explore what it means to facilitate 21st century learning. Through exposure to a variety of free educational tools and a focus on how those merged with my content I was able to deepen my understanding of how to integrate technology into my science classroom.

In this course I dove deep into the ideas presented in the Next Generation Science Standards (NGSS). Through the exploration of core scientific ideas and principles I worked to develop a greater understanding of how to engage in an inquiry based approach to learning. The course culminated in the design of a lesson plan designed to address NGSS. This lesson was designed to allow students to engage in hands on exploration of scientific concepts.

In this course I critically examined what has shaped my beliefs about education and analyzed how my beliefs influence my approach to educational inquiry the my classroom. I analyzed how my foundational thoughts on education and my current practice in education shape my classroom policies and practices. I also reflected on my thoughts about educational inquiry to further develop my understanding of how to foster a classroom rooted in inquiry and scientific exploration. *TE 861A* Teaching Science Understanding Tamara Heck

### <u>Fall 2015</u>

CEP 802 Developing Positive Attitudes Towards Learning Dr. Evelyn Oka

CEP 810

Teaching Understanding with Technology Kristen Powell & Emily Stone As the name implies the primary focus of this course was to learn techniques for teaching true understanding of science. The work for this course aimed to take the focus off of memorization and fact regurgitation and put it on gaining a true understanding of scientific principles. In this course I developed my ability to use formative assessments to evaluate scientific understanding. Through the development of assessment skills and best practices in scientific inquiry I was able to refine my classroom methods to include additional inquiry based assessments.

This class examined the relationship between attitude and motivation to learn. During this class I learned how to identify negative attitudes towards learning. I learned how to implement strategies to address those attitudes. Considerable time with spent exploring the differences between intrinsic and extrinsic motivation. In this course I worked with a specific student to identify negative influences on his attitude. Once those issues were identified I began to develop and implement strategies for how to help increase intrinsic motivation and a desire to learn.

In this class I was able to more deeply explore the complexity of TPACK. I researched additional methods to increase the use of technology in order to help my students develop a deeper understanding of content knowledge. This class specifically focused on the use of media as a teaching tool. I was able to learn a new skill through the use of youtube and reflect on how technology can be used as the means to master a skill or concept.

### Spring 2016

CEP 811 Adapting Innovative Technology to Education Amy Pietrowski

*TE 846* Accommodating Differences in Literacy Learners Dr. Dongbo Zhang

### Fall 2016

CEP 812 Applying Educational Technology to Practice Andrew Steinman In this course I continued my exploration into TPACK. Additional focus was placed on the potential that technology has to increase enjoyment and add value to learning. Through experimenting with a variety of technologies and applications I was able to further develop my own knowledge of various technology tools. I was also able to discover many ways in which I could use technology to enhance my teaching practice.

In this course I examined the role of literacy in the classroom. Through my work in this course I developed a much clearer idea of my role in teaching literacy. Through the investigation of various literacy techniques and best practices I was able to further develop my understanding of how to effectively teach literacy. I explored techniques to use for all students as well as ideas that work to provide extra support for students who struggle with literacy concepts.

In this course I looked at the effectiveness of various technologies to enhance the learning experience. I worked to further develop my Professional Learning Community (PLN) while focusing on the use of technology to enhance my practice. Considerable time was spent exploring the benefits of social networking on enhancing my teaching practice. In this course a considerable amount of time was spent exploring potential solutions to some of education's biggest, or most wicked, problems such as the role of failure in learning. CEP 813 Electronic Assessment for Teaching and Learning Collin Gallagher & Spencer Greenhalgh This course focused on the various uses of assessments. During this course I further developed my understanding of three different types of assessments; assessments as learning, for learning and of learning. I reflected on the components of effective assessments and worked to develop my own criteria evaluating assessments. The course ended with the creation of our own assessment based on the criteria we designed throughout the course.

#### Spring 2017

*CEP 820* Teaching Students Online Dr. Anne Heintz & Carmen Richardson

ED 870 Capstone Portfolio Dr. Matthew Koehler This course focused on how to effectively facilitate online or blended learning. Throughout the course I worked to develop a online module for a course within science. My online module teaching me how to manage the details of online learning and create an environment where students can benefit from the online experience. The course culminates with the creation of a completed online module.

For ED 870 I am creating a portfolio to showcase my work at Michigan State University. I am learning how to create a web presence in order to display my accomplishments in my graduate studies.