Final-Course Reflection
CEP 818
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I was just looking at a paper that I wrote for another class, that class happened to be my first online class though MSU. My first line said "this is my first class and to be honest with you I didn't really enjoy the whole online experience." The funny thing is now that I have had a couple of classes, I actually prefer Online classes to the regular meet every week or twice a week. I enjoy the flexibility and anonymity that online classes give us. I cant help but see the similarities that my class preferences, seem to mirror my evolution as the class went along. Most books start off pretty slow(except Mathew Reilly, great action author, check him out), then as you get into the meaty middle you are sucked in to and read until you reach the climax and then the conclusion. Sparks started out pretty slow for me, I struggled with the repetitive writing style, then as I reached chapters 4/5 I started to get sucked into the book, for myself the climax was the section I was assigned to for the "multimedia companion" chapters 11, 12, 13 and the conclusion in chapters 14, 15, and 16. In the rest of the paper I will be concentrating on the how each module molded my new ways of thinking, creatively, my own creativity, my students and teaching creatively.

As part of this final paper, I have to go back and reread my papers, what I initially thought as I read the chapters and when I finished the whole book has some definite differences. In chapter one we took a look at the different ways that people understand or are able to see things and then know from sight the answer to questions . As discussed in Chapter 1, often time's people are not able to explain to someone else why they know the answer to a problem. Students and teachers alike have that "AHHH HA" or Eureka" moments everyday, some can be explain others just happen. It is in those moments when you know by the look on your students face that he or she finally "gets it' that what you are doing is important and it really is a great feeling. Chapter 2, the authors expand the issues from individuals to the concept of interdisciplinary studies and curriculum in the schools. They also talk about how schools are not set up for that type of education. Instead the schools are separated by subjects with very little cooperation between the subjects, and rarely do work together to give a well rounded education. At the time that I read this, I found these fact to be both true and upsetting. I believe that it is important for teachers to collaborate to inject creativity in the classroom as much as possible and being able to cross disciplines bringing creativity the students need. Subjects that cross lines into different areas seem to be retained best by the students. The idea that in education all subjects are related and you need to learn some from each in order succeed is completely lost on them.

To be honest, when I reread what I wrote for chapter 16 in that first module write up, I was almost embarrassed, I only talked about 2 of the 8 educational tools Sparks believes need to be changed and give very little reflection considering how important

those ideas were to become. After reading the book, and when I read chapter 16 the second time, I was like, "alright, that's a good idea, that's a good idea, I like that, I think that's great, we definitely need that in the classes." My whole out look on the book and teaching as a whole seems to have been altered. Maybe I didn't understand what I was reading or maybe it was just my lack of depth to the knowledge that we coved in the periods between reading but I see felt like my answer in module 1 was pretty weak.

In module two we moved to two new, different types of thinking skills, Observing (chapter 3) and Imaging (Chapter 4). On one hand you have Observing or, the practice of looking at an object from different points of view, using different methods. For most people, visual, is the most important form of observation, other forms include hearing, smell, touch and taste. When it comes to visual observation it can be broken down into smaller subgroups, such as the difference between looking and seeing, passively looking and actively observing, the patience to look and look and look and look. As Biologist Geerat Vermeij says" Much can be learned from books but, the knowledge thus gained is inevitably filtered though someone else's faculties. There is simply no substitute for making ones own observation in the wild."(pg 37) As a teacher if I am able observe that the class isn't understanding what I am trying to explain, I have to change the way I am explaining it to the students, maybe using more visuals, or using the students themselves as part of the presentation. Observing is a major component to teaching creatively, observe what is going on and make adjustments accordingly.
Imaging deals with what people see in their minds. The people who are able to do this amaze me, as I read the book, I was amazed and now going back I am still amazed at the ability some people posses. The idea that Beethoven and Mozart were able to compose complete symphonies in their minds just baffles me. Some people have that ability to create, visualize, and manipulate, what they were working on before actually starting physical aspect of the project.

When I look at the two ways of thinking, to me they are completely different, yet connected. Observation is using what is found in the natural world and using that as inspiration whereas imagination is using the brain to complete what the invertors or artists are working on before they begin the physical process. As an educator I believe that you should concentrate on what you do well in the classroom. But I also believe that it is your job to put the students in the best way possible for them to succeed. What that means, is that if some students excel at Imaging, then figure out ways to allow them to use their abilities.

Module Three dealt with chapters 6 Recognizing Patters and 7 Forming Patterns. For teachings patterns are everything, when it t comes to everyday teaching. For myself as a Social Studies teacher Sparks gives us numerous example related to my subject. "Pangaea where a couple of billion years ago the continents were all one big mass and over time they have spread apart, even elementary students can see that on a map South America and Africa seem to "fit together". As a Geography teacher there are other patterns that I can pick up that explain this as well. One, the "Ring of Fire" in the Pacific Ocean, you can see where over time hotspots have created volcanic islands all around the pacific plate, examples include Hawaii, the Aleutian islands off the coast of Alaska. You

can even figure out which way the plates are moving and see how long the plates were stationary by look at the islands and seeing which ones are older and larger. Another example would be mountains and the crashing together of massive land masses, showing again the moving of the tectonic plates under the earth's surface, The Andes, Himalayas, Alps, and Rockies Mountains are all examples of the plates on the move. It is my understand that Forming Patterns can be anything, including, African Music, Vertical Lines in Artwork, and Adding Triangles to triangles to make triangle forms with massively long perimeters and other triangles with hardly any area inside them, writing, and even the patterns founding DNA , and even the musical group Stomp. That means having a strict routine for the students to follow every day. The pattern of the class should be somewhat the same each day. In my class it starts out with "Bell Work" about ten minutes of review, followed by the work for the day and ending with either starting their homework or a review of what we covered that day in class. I like to that think I follow that routine and that it helps the students stay on track and do the best that they can in the class. The way I structure or form the pattern of my class is similar to the painting by Gene Davis brought up in the book, I have set the tone of the class with the routine just like the artist set the tone using the Olive and Blue lines. After setting the tone you need to break that with just like Davis does with the three vertical lines of Red, Yellow and Green. In the classroom breaking that routine will be done by having the students do something out of the ordinary, maybe go to the library to research on their own or projects that they have to present to the class.

All teachers should be able to see patterns in their student's behavior and in the classroom. Some patterns are easy to figure out,(mostly because they are annoying!!!!) if the same student asks everyday to use the restroom, or is tardy every day. It's the patterns that are harder to recognize that really matter. The other question is: do you as a teacher WANT to see the patterns? I know there are more then a few teachers in my building who blame the students for doing poorly in their class, when in fact it is their teaching that is really the problem. Those are the kind of patterns that they don't want to recognize. The readings forced to think about my teaching by making me realize I need to add not only more creatively into my teaching but also allow the students more freedom to explore the topics on their own. What came to my mind is this: Where two people get into a fight there are always two sides to the story. "He did this," and "she did that," yet when it comes to history we hardly ever hear about the other side. History is written by the winners and for that reason all our history text books are usually one sided. A creative way to let the students learn about history is to have the explore issue from the side of the losers. An example might be the South's feelings about the Civil War, or how the Japanese felt about the dropping of the Atomic bomb. Have the students research what is on their on those topics, then write a lesson plan to teach their classmates about what they have learned. There are always two sides to a story.

Not M&M's but rather A&A: Abstracting and Analogy, one "consists of singling out one feature, which, in contrast to other properties, is considered to be particularly important," (73) the other is making comparisons between two unlike objects. Both are useful in our schools, in our attempt as educators to give the students the best possible education for them. According to Sparks "knowing what abstracting is and why it is so

important, though, is only half the problem. The other half is learning how to find the simple concepts hiding among complex expressions."
When I first wrote about abstracting I might have said something about my hating abstract art.

> "I hate Abstraction, I hate abstraction art work, I hated reading this chapter, and I hate everything to do with it. I think it is stupid, I don't want to look at a "painting of a bull" that is a couple of lines; I want to see the damn bull painted to perfection. To me abstraction is the garbage students draw on their desks when they're bored, not an art form."

I would like to apologize to all the abstract artists out there. There truth is, I don't like it because I don't understand it. I think that it is important to understand that maybe some of my students might have theses same feelings about, History, or the way I run my classroom. What I have realized is that Abstracting has its place in not only Art but also education. "Mathematics is the tool specially suited for dealing with abstract concepts of any kind. There is no limit to its power in this field."(75) Thinking back to my science classes especially chemistry and physics, in high school and many times we were breaking down chemical formulas and such. "Every scientific theory or principle is a surprisingly powerful and insightful abstraction." It is important to look outside of the box, to find different ways to do things, to change things, make things more interesting and abstracting does that. I actually enjoyed trying to make a abstract photo of a baseball, and my final digital photo, I think, what I did was a from of abstraction. Link to Picture. The wind blowing a group or flag poles, changing the way that you normally look at flags flying.

An "Analogy refers to a functional resemblance between things that are otherwise unlike. (137) Analogies are great to use in the classroom. I teach, or should I say taught in a school district that has a very large Muslim population, as a result there are many cultural differences that as a teacher you need to deal with, some examples are, religion, sentence structure and using different words or phrases, the whole idea and many girls don't care about school because they are just going to be married off when they are 16 or 17 and expected to have babies and run the households. As a teacher you need to find ways to communicate to the kids at their level, using examples that they can relate to, try to make the information relativity to their lives. According to Sparks, "the critical part of interesting analogies is that they reveal not mere resemblances but in apparent relationships between abstract functions, one of which is understood, the other not."(143) A fellow coach once told me, teach it to them, if they don't get it, teach it a different way and if that doesn't work try a new third way. Teaching using analogies is one of those ways to look at something and try to connect what you are teaching to the students to make it purposeful to them, thus they will remember and lean it better.

Sparks says it best when he writes, "Start with what you know or what the person you are teaching already knows, and then finds the functional analogy that bridges this known thing with the unknown one that needs to be understood."(156)

Moving on to Module 4, both Chapters in this Module "Body Thinking" and "Empathizing" are important for Teachers in the classroom. You must know and trust your "sixth sense" as to when things are going well and especially if things aren't going well or problems are in the air. Teachers must have a passion for their jobs and part of that "Empathizing" comes from experiencing things form another point of view, either something unexplained takes control or you are able to being something to the classroom that you have seen somewhere else. Either way its all about the students and having them learn in the best way that it is for them to learn.

To Empathize by definition is "to identify with, understand, relate to, feel for, sympathize with, have a rapport with, feel at one with, be on the same wavelength" Sparks gives us countless examples, from writers feeling like someone else took over their bodies during the writing to process, to the way historians look at the world or events that transpired through the eyes of the people who lived at the time. As a history teacher it is my job to not only teach the basic 5 W's, (Who, What, When, Where, Why, How) but to get they students to really become engaged and interested in what happened in the past. "For historians, empathizing means being able o to see the worked thought other people's eyes."(1897) . I like to tell a good story, good stories are interesting, fun, informational and they must be told with some type of passion. When reading Chapter 10, , Sparks gives us numerous examples of people going into character "A musician cannot move others unless he to is moved. He must feel all the emotions that he hopes to around in his audience"(182). When I lecture I make a point to attempt to get into character. In order to make it interesting the story must somehow relate to their lives, since we all know that children as and many adults are rather self-centered. My lecturing is like the examples of given in Sparks chapter 10 on Empathizing. The hour starts and I know the basics of where I will be going with my lecture but not exactly what I am going to say. Once I get started I get in to the flow of things and it just takes off. I find that if I am not into a lecture for whatever reason the students feed off that and they wont be either. As a teacher you must bring that passion to each and every class, not just the classes you like or the last class of the day, but to all classes so that all of your students are being given your best.

Body Thinking, "Thinking with the body depends on our sense of muscle movement, posture, balance, and touch……called proprioception, is fundamental to our experience of the body. As we walk or run or jump we are constantly aware of how our body feels; and we know where we are in space. Most of the time we have this awareness without realizing it." (161) Just like this quote, as a teacher you must have this "sixth sense," you must know everything thing that is taking place in the classroom and you must be in control of it all. Sparks brings up the idea that Musicians and Dancers can "Feel" what's going on in their Music or dance pieces, "Dancers seem to understand movements in terms of character or even a body different from their own"(183). As a teacher you must also have that same "Feel", only the feel is for different reasons. You have to know your classes. Each class is different. The students are different, some classes are more advance, some more mature, some ask more questions. Most importantly each class learns as a group differently. As a teacher it is extremely important to be able to be like a chameleon, you must blend to your settings, or

in this case you must be able to blend to the specific needs of each class. Does first hour need more critical thinking type lessons, is fifth hour a little slow as a group and needs some more worksheets, being able to know exactly how each class is, is extremely important. Teaching in my eyes is all about the kids, if the students are learning, having fun and retaining the information then you as a teacher are doing a good job. If like many other teachers, you are unwilling to compromise, refuse to change your teaching style, exact the students to be the ones who have to conform to your teaching style then I feel like you are no longer doing a good job and it might be time to find something different to do with your life.

As I said in the opening paragraph chapters 11,12, and 13 were the high point of Sparks for me both as a reader and their potential use to bring creativity into the classroom. Chapter 11 deals with Dimensional Thinking. In Social Studies, especially Geography Dimensional Thinking is very important. I think that I enjoyed reading this chapter the most of the three. Some parts were really interesting to me, Origami, I have always found to be very cool, I loved making paper airplanes as a kid, Time Lapse photography is amazing to me, Rubik's cubes and Lego's have also always been fun. Dimensional Thinking is taking something 2D and making it 3D or the reverse, going from 3D to 2D. I honestly think that these "games or kids toys" can bring so many interesting projects and different ways to learn into the classroom. One way would be to have the students attempt to make a 3D object out of paper; sort of like origami but have them create and build something that we are studying, a globe, a plow, bow and arrow, a lance, waterwheel, castles, the possibilities are endless,. Another thing that I could bring into the classroom would be old Lego's and have the students build something from them. House, castles, buildings, a guillotine, bring those structures that we talk about in class and make them part of class in 3D form. I think time lapse photograph is so cool, watching a building being made, or of ants devouring something in seconds is awesome. What you could do is have the students make their own example, one that is in my head is of the local mall and how the parking lot fills up over the course of the day, especially during the Christmas season. Another example would be the way bounders in certain areas have changed over the years and have the students study those changes and be able to actually see where they have moved and why.

Modeling is a way for students to see something at a different scale, to make things at a more appropriate size. If it is something massive like a battle or the Great Wall of China, you want to make it smaller so you can see study, explore the whole thing. At the same time if it is something small like and Atom you want the model to be blow up so that it is a visible and maybe used as a learning Device. Like Dimensional thinking, Modeling would be a great way to bring new and creative ways of thinking and teaching into the classroom. Today there are so many examples that students can use to simulate either battles that were fought or even the building of whole civilizations A teacher I used to work with each year for the unit of the Berlin Wall would turn his classroom into Berlin. He would separate the students, use ping pong tables to recreate the Wall and then have actives for each side that corresponded with what the East and West Germans went though. With the advancements in technology, computer games are where it's at. Today there are so many amazing and realistic games out there that can have a huge impact in

allowing the students visualize and understand what took place in the past. But when it comes to modeling and dimensional thinking, what really comes to mind, since I have been reading books about the Middle or Dark Ages, is building a castle or fortress. I think building a castle with a drawbridge, a moat, and palisades, watch towers would be both fun and educational for the students. Another idea would be having the students build miniature catapults that would need to be fully functioning and have a competition to see which students could make the catapult that can fire and object the furthest. I think both these ideas transcend across all 3 chapters in this reading, from scaling in chapter 11, modeling in 12 and play in 13.

To Play is to have fun, to mess around, to lighten the mood, to have a good time, to joke around and not take life so seriously. "Play is also useful because it strengthens various mental skills, it can exercise and develop any thinking tool, symbolic play fosters tools such as analogizing, modeling, play acting and empathizing by invoking a make-believe world where one thing stands for another, and game playing teaches the making of rules within externally bounded situation s that define how we may behave or thinking as well as the breaking of those rules"(249) The people, who Sparks did talk about, Fleming, Feynman, Calder, Lear, Dodgson, etc, broke out of the mold that most people expected them to adhere to and when they did, they found that their play initiated may new finds and discoveries. Sparks brings this up because I think often times people do take life to seriously and because of that they get burned out. Sparks wants people to realize that thousands of amazing discoveries that have happened when people are tinkering around for fun and enjoying what they do, rather then because they are forced by outside pressures to figure something out. For myself, play is very important when it comes to my own creativity and my own sanity. I love to goof around, to tinker with things, and work things out on my own. I think that it is also important for the students in our classes to be able to take a day off or two and not worry about taking notes, or tests or quizzes, writing essays and just be able to play around with some type of project.

And we have finally come to the end of our modules, lucky #7 or as I titled my "Mickey Mantle" since that was his number. I think that the ideas in the module are very important but by the time we got here I had reached by climax in Module 6 and I really didn't enjoy reading about Transforming, Synthesizing and then the Synthesizing Education again. For me transforming and synthesizing were in a way redundant. As I was reading them I was saying to myself, wow this is obvious. Sparks defines transformational thinking as "the serial or simultaneous use of multiple imaginative tools in such as way that one tool acts upon another." Thinking about my short career so far and I can come up with numerous ways that both Michigan State and my school district have attempted to make me a better teacher. As an undergraduate I completed a full year of Student teaching. During that period I had two different lead teachers, I went to three or four different schools to do observations of teachers in other subjects. What that did for me was really gave me a bunch of different ways to look at teaching and allowed me to see numerous ways to handle problems that arise in every classroom In some classes I played and really interacted with the kids, in others, I just observed, I followed patterns, formed patters, and modeled. One remembering strategy that Sparks did bring up that I

really like in Chapter 14 was the mnemonic device. I also gave an example form when I was in 5ht game of a mnemonic device that we made that I still remember today.

Chapter 15 connects transformational thinking with synthetic understanding. As we have already discussed transformational thinking is……. Synthetic understanding is when "sensory impressions, feelings, knowledge, and memories come together in a multimodal, unified way. "(296) One quote that really sticks out for me in chapter 15 is "We feel what we know and know what we feel." Sparks continues with this, "This kind of understand depends upon an integrated use of thinking tools such that, first, we synthesize sensory impressions and feelings and, second, we fuse our sensory synthesis with the abstract knowledge that exists in our memories as patterns, modules, analogies and other higher-order mental constructs." Everyone has had an one of those experiences described by Marcel Proust as he bite into Madeleine dipped in tea, bringing back intense memories of childhood is a classic example with all the senses coming into play. s a teacher Sparks concept of Synosia. " is the union of different form of knowledge or synthetic knowing…….is the necessary and natural result of imaging, analogizing, modeling, playing, and transforming."(307) Why I find this important is that like Desmond Mason, I think it is important be think like what your are studying. In this case I need to think or become a student again. For my students, I think it is important for me to take a step back and look at the what we are doing form the eyes of the students, is this work interesting, is it important, if it isn't, then the students wont pay attention, they wont care and they wont take it seriously. And I think that I do that and it really does help the students out.

I didn't remember anything form the first time I read chapter 16 so as I was rereading it everything came together. I think Sparks does a good job of making their points come across. Reading each of the eight goals, for changing not what we teach but how we teach, I feel compelled to try each of these next time I get into the classroom. Each of the eight goals seem so simple in writing and there seems to be no reason why as a teacher I cannot implement them into my classroom. I will finish this course with a brief description of how each of these 8 can be worked into the classroom.

1. We must emphasize the teaching of universal processes of invention in addition to the acquisition of disciplinary products of knowledge
   -to make sure my students use exercises that develop deeper thinking cognitive skills not just rote memorization

2. We must teach the intuitive and imaginative sills necessary to inventive processes
   -Encourage the students to use their imagination to solve problems.

3. We must implement a multidisciplinary education that places the arts on early footing with the sciences.
   -Attempt to bring the arts in the classroom, use example of music and art and architecture

4. We must integrate the curriculum by using a common descriptive language for innovation
   -get the whole school or at least a number of teachers to work together with the students using the same terminology

5. We must emphasize the transdisciplinary lessons of disciplinary learning
   -Again try to get the teachers from different subjects working together, good example is having the students read Animal Farm in English and talk about Communism and Stalinist Russia in Social Studies

6. We must use the experiences of people who have successfully bridged disciplines as examples of creative activity within our curricula
   -Bring in upperclassmen to talk to the kids about their experiences

7. To reach the widest range of minds, ideas in every discipline should be presented in many forms.
   -Attempting to bring in material from other disciplines and show how they are related

8. We must forge a pioneering education, whose purpose is to produce the imaginative generalists who can take us into the uncharted future.
   -Bring as many new ideas to the classroom as possible in order to stimulate as many kids as possible.