Teaching to the Individual in a World of Mass Production

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Introduction

“Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer.” —Adam Smith

When I was in school it wasn’t uncommon to hear a teacher described thus. “They are a good teacher, but they only teach to the smart kids.” I know now that teachers ideally want to reach all of their students. But I feel that there was a certain idea of a procedure to education that would create a student ready to tackle any 9 to 5 job. When I first became an educator I recall a conversation I had with my brother. “Schools are like factories with students as the product and teachers running the assembly lines. We want the product, the majority of the students, to come off the line, graduate, with the same core skills.” He and my grandmother, a retired teacher, went on to discuss how in order to keep numbers good and test scores high, one needed to teach to the middle 80%. The lowest 10% were either lost causes or receiving special services and therefore didn’t need more time and the upper 10% would get by just fine on their own. With standardized testing being such a large part of a teacher’s and a school’s evaluation, there is an even stronger emphasis placed on teachers reaching mass quantities of students.

My experiences through Michigan State, namely in the MATC program, and as a teacher in an alternative classroom have taught me that the perfect “product” of college ready student is not for everyone, standardized testing does not define student ability, and teaching to a general
populace usually does not end well, for the students or the teacher. While I am not claiming the views of my brother and grandmother, in my early years of teaching, I was hard-pressed to argue against the mentality of mass producing citizens; especially with the shift towards online classes.

If we focus on the purpose of education, which I postulate as the ability to analyze and use pertinent information, and how that is affected by society, especially the technology around us, we can quickly conclude that there is more to education than the one-size-fits-all mentality. When we look at standardized testing, we must ask ourselves, will students pass because we taught them what was on the test or will they pass because they have a working knowledge of the content that we have taught them to apply to situations, including tests? What kind of an environment would there need to be in order for all students to feel comfortable taking risks and making mistakes in their learning? Lastly, how can teachers create lessons that meet the needs of all of their students without teaching to that middle 80%?

The Purpose of Learning (Artifact 1 from CEP 810)

“The ultimate goal of learning is to have access to information for a wide set of purposes” (Bransford, Brown, & Cocking, p. 73). I pursue the definition of learning in Artifact 1 from CEP 810. This short piece is a look at what it means to learn with the level of access society has to information using technology. I chose it as an artifact because it showcases my views of learning as the value of analyzing content rather than memorizing facts about it. This meets Standard 3 in regards to analyzing practice and policy in a classroom and adapting them to meet the needs of students and employers who are looking for innovative workers with experience with technology. This also meets Standard 5 because the piece is based on a research article done about Learning and is used to demonstrate the ability to bring this knowledge to students by sharing with them the
purpose of my pedagogy in regards to technology and learning. Lastly, Goal 1 is touched upon as this is an inquiry into the meaning of learning in today's society. This goal will be further and more completely observed in Artifacts 2-5.

When I thought about the way in which students use technology as a way to source their daily lives, I realized I had to modernize my classroom to meet this mentality. From artifact 1, I state, “Because technology plays such an important role not only in the daily lives of students but also in the workplace, it is critical that education is able to prepare students for an environment in which everyone has access to information.” Now I am looking at students as well as employers constantly integrating technology. Why not use this as a means to diversify the learning in my classroom? Students should expect the use of technology to affect their education even if that technology is not being used. The way we teach is also different now that we have access to thousands of resources, lessons have a chance to be shared and critiqued by others and we are no longer stuck with the resource of a single text book.3=9-3603

During my CEP 810 class, Teaching Understanding with Technology, I looked into the way learning had changed with 20\text{th} century technology. As I describe in Artifact 1, the way we approach knowledge today is vastly different from how we have approached it in the past. Mostly due to technology. With so many resources with immediate access, there has been a shift from learning “what” to learning “how”. With search engines like Google and Bing in the hands of the majority of our students and teachers, having students memorize facts seems redundant and time consuming. However, “learning with understanding is often harder to accomplish than simply memorizing, and it takes more time” (Bransford, Brown, Cocking, p. 24).

At the time I did not know how to accomplish this diversification. I knew from undergraduate classes that I wanted to differentiate instruction, but I was still figuring out how to
do so. I talk about this more in a later section of this paper using Artifact 3: Repurposing a Lesson where I discuss the mentality of rewriting a lesson to meet more student needs and in Artifact 6: ActionPackedMath where I discuss a math task and its value with a “low threshold and high ceiling”. At this point in my education, however, I recognized that I wanted to teach to the individual, I even knew how to create a task, but I wasn’t quite sure how to implement it to its maximum effectiveness. I am still working on that. However, in recognizing the types of learning that exist and how it is possible to reach students on multiple levels with a single lesson plan, my ability to connect with students was greatly improved. My mindset towards teaching was also brightened as I am now finally able to argue back against my brother and let him know that students are unique, teachers recognize this, and even if politicians are looking for end results with general numbers from standardized tests attached to them, my fellow teachers and I are working with each student to reach his or her personal best.

**The Logic of Assessment (Artifact 2 from TE 825)**

When we utilize assessments correctly they can be “empowering” and “a tool for students to show what they know and can do” (Sleeter, p. 79).

In Artfact 2, The Logic of Assessment, I discuss how the emphasis in a standard curriculum is to teach the facts (usually skewed) in our textbooks such that all students have the exact same knowledge base (Sleeter, 2005). One of the questions MATC had me ask: how important is it for students to have the same knowledge? When we assess students using standardized tests, we compare them to a state or national norm. This doesn’t correlate with the differentiated method of instruction we are asked to teach with. It seems that we want students to use individual talents and interest to generate deeper learning, but we compare them on a very narrow scale. When we look
at state or nation-wide tests, we begin to see “The narrowing of curriculum in which teaching to the test (and teaching how to take tests) substitutes for deeper intellectual inquiry…” (Sleeter, p. 69)

This artifact was chosen to represent my growth in the area of understanding that assessment is a very valuable tool. Often with such negative spin in the media towards Standardized Testing and all of the impact those scores have, we lose sight of how importance assessment is to a student’s growth. This artifact is a reflection upon standardized testing based on the discussions and reading of Christine Sleeter. It meets many standards (1-4) because this discussion paper covers ”commitment to students and their diversity” and how that relates to testing all students by the same standards (S1), “how to design curriculum, instruction, and assessment” and the difference between assessing a student for learning and assessing student based on a national or state average (S2), how the topic of standardized testing can be an issue for many students and parents and considers how to include assessments that are beneficial to student learning (S3), and lastly, because the paper was based on a discussion among peers, it analyzes my own practice of which assessments I find most useful in my own classroom. This paper also meets Goal 1 because it is an inquiry into types of assessments and how they work. It meets Goal 3 because of the D2L (class) discussion that led to many of the topics covered and the opinion as a whole on different types of assessment.

When we consider assessment as a tool to promote growth as well as a way to monitor our own success in teaching content, testing is a good thing. However, “when we are given strict guidelines it is often difficult to include any creativity or diversity in our lesson plans.” If we are teaching to the standardized test we can lose out on those high impact lessons that relate to students so well. I feel that if we are teaching strong lessons that impact our students, this will help them
more than solely teaching them those topics they may be tested on. If we stress the ability to figure things out, we better prepare our students for not only testing, but the world beyond k-12 education as well. This concept of teaching how to learn meets the construct of this entire idea I am presenting as the culmination of my MATC experience: the importance of teaching students as individuals rather than as a singular entity.

**Establishing a Classroom Environment (Artifacts 4 and 5 from TE 808)**

Artifact 4 and 5 are both are from TE 808. Both are papers that review the community and its environment inside an alternative school and classroom. Artifact 4 is my own research, what I uncovered in my building through surveys and discussions with students. Artifact 5 is the literary research I did in order to delve into other mindsets of an alternative class. This literary analysis helped me create my own questions to ask students, parents, and staff within my school. Artifact 4 is my own research on the environment within my building and thus meets Standards 3 and 4. It covers issues within the school, part of which includes my own practices and classroom management.

When the data was collected and analyzed, it was then shared with my fellow teachers and my principal and used to support our data for our school improvement plan and to help improve our school community. Artifact 4 also meets Goals 1 and 3 because it is an inquiry into school practices and policies as well as a team collaboration in how we handled the results.

The past three years I have been teaching in an alternative classroom. When we polled students, we found the highest levels of dissatisfaction came from lack of motivation and problems with peers. 15% of parents said their child did not have good levels of motivation. However, one parent described the other components of environment positively by stating: “Since the beginning
of the school year I have seen an increase in confidence. I believe that is due, partly, to a smaller class size and the availability of the teachers when help is needed.” (Parent Survey)

Artifact 5 focused on how I created my surveys for information gathering through literary research. The reason I have it covering Standards 2-5 is because the research covered many aspects of a school environment. The true purpose of using this short Literary Analysis Paper is because it represents Goal 3. I like both of these artifacts for Goal 3 because they show how I analyze data and my capability of researching within my classroom and researching by reading through other's findings. The three things I focused the research on were student collaboration, parent involvement, and content level. Because of the way our program was set up, students worked at their own pace almost solely using the internet.

One idea I took away from this was how many doors of collaboration an online classroom can bring. Many of the students in my alternative room were uncomfortable talking with their peers and working at their own pace, they were rarely working on the same assignments. “Having the internet as a readily available resource in classrooms gives students an entirely new way to communicate with each other and with the world (Lynch, 2002). After completing this research, the teachers in my school began to explore ways in which we could use online collaboration to promote student connectivity and to allow students to learn the skills needed to have online discussion.

The second factor I looked into was parent involvement. "Schools must understand that lack of participation by parents does not necessarily mean they are neglecting their responsibilities. They simply may not have the time, resources, or know-how to help out" (Wanat, p. 47). This was a very eye-opening piece for me. It is difficult to admit, but I often found myself judging parents who were not fully involved in their child’s school life. In our undergrad classes we talk about
relating to our students and being open minded to the many issues we face, but this was the first time I had looked at these issues from a parent’s perspective. This is still something I have not fully formed an opinion on but it has started me down the path towards more pro-active communication with parents.

The last thing I researched was content level. “When a student continually fails at content, they stop focusing on that content” (Willingham, 2009). In connecting content level with my own research, I found that while many students said they had goals to graduate and continue their education after high school, 25% said they would be unsuccessful in achieving these goals. Strangely, all students thought they would be successful in a future job even without success in school. Students seem to want to succeed but have trouble establishing goals or feeling confident in success especially when the content is out of their reach.

What can we do to establish a strong sense of community? We need to establish first a student’s sense of self. One of the ways to do this is by giving students differentiated instruction and allowing them success in things they find important. We can do this using the tools at hand, namely technology and online resources for collaboration. Secondly, we need to reach out to parents. Even if they are unable to act on what is occurring in the classroom, it is still important to keep channels with the community open so that everyone feels involved and is able to help work towards the student’s success. Thirdly, we must make content accessible to our students which circles us back to the first point and leads me to my final topic of discussion.

Meeting Diverse Needs (Artifact 3 from CEP 811 and Artifact 6 from TE 808)

Artifact 3 - Repurposing Lesson Plan
During CEP 811, I wrote a lesson plan and after researching different types of learning. I explored expansive learning and multiple intelligences. Expansive learning is cyclical, essentially following the sequence of question, explore, model, and repeat (Molomo, 2011) and “[multiple intelligences] theory states that the human brain is modular and that all humans possess at least seven intelligences” (Tai, 2014).

In my blog post, actionpackedmath.wordpress.com, about redesigning a lesson to meet the diverse needs of students, I discuss these two concepts and how I use them to reshape a straightforward lesson into one with multiple levels of differentiation. The lesson already had to be re-purposing some item we had around the house. I chose origami paper and combined that with copper tape to create a lesson on circuitry (physics). This particular blog focuses on the second iteration of this lesson plan: how to adapt the lesson to meet the needs of individual students and how to allow students their own creativity without losing out on the content knowledge the base lesson presents. “To help students’ diversified learning, effective teachers should strive to understand and recognize the students’ intelligences” (Tai, 2014). This artifact meets Standards 1 and 2 and Goals 1 and 2 from the MATC program because it focuses solely on student learning and on adapting a lesson to meet diverse needs.

This project helped shape my idea that it really is not difficult to create a lesson plan, passing off some power of decision-making to the students, and still present good, foundation content. Because students are choosing parts of their project, they now discover a sense of ownership to the task. Because students are creatively deciding how to present their findings they are learning problem solving and decision making on top of the base lesson of circuits. This was one of my favorite creations from any of my CEP classes because through it I
was able to show the most growth in my thinking about treating students as individual learners without toiling over super complex lesson plans.

Artifact 6 - Actionpackedmath.weebly.com

“A task is an activity that allows students to discover or further comprehend a mathematical concept. A good math task is one with a low threshold and high ceiling; it is simple enough in instruction that every student understands what it is they are trying to accomplish, but the connection of ideas and the ways to possible solutions are such as to challenge even the more advanced students.” This is how the landing page of actionpackedmath.weebly.com appears. A website created solely for the creating, sharing, and discussion of lesson plans that meet the criteria of a “task.” If we apply the concepts of learning using technology, generating a learning community where students feel motivated to learn and lesson that meet diverse needs, we can turn to open-ended questions that are relevant to our student populace.

If we seek to stay caught up in a modern world, it is key that we are continually collaborating with our peers. One of the things my time at Michigan State taught me is that a teacher should be a leader in the classroom and in the community. With technology we now have access to any number of communities beyond those in which we live. As an educator, it is vital to continue growth and development be participating in online communities and collaboration. After working with the idea of tasks, a mathematical lesson that meets diverse needs of students, many classmates of mine had created or refined lessons and submitted them to our class site. For a project on being active members of the educational community two of my peers and I created an online database using google drive to store the plans and google blogs as a way to sort and file the plans based on grade, topic, and standards.
This website started as a way for us to have continued access to those tasks that our class had worked so hard to create. It quickly turned into something more community oriented. We created a splash page defining tasks and their role in the math classroom. We added a forum page, for teachers to discuss what worked and what went wrong, and we added a place for others to upload their own tasks to the database. While there has not been much time to improve on the site lately, I have maintained its upkeep and over four years we have over 21,000 views. This meets Standard 2 of the MATC program because, while it is a compilation of tasks, it is full of relevant content to the math education field. Primarily, it meets Standard 6, "Proactive participation in collaborative initiatives," and showcases how I am keeping in touch with the math community and offering teachers an online place for lesson collaboration. This artifact also meets Goal 3, because even though the site is still novice, it does contribute to the community of educators. The site showcases an example of what it means to stay connected in the educational community.

Conclusion

Public education should be regulated. Standards and regulations and even standardized tests are how we keep others and ourselves in check and help us stay focused on a common goal. Because of this necessity of regulations, however, we, society in the United States, trends towards a society of conformity. Which leads me to a quote by Erich Fromm, "Just as modern mass production requires the standardization of commodities, so the social process requires standardization of man, and this standardization is called equality," the final goal being career and college readiness and a conformity to societal norms – a seemingly broad way to define the narrow, ideal resultant student. Regardless of this societal drive towards conformity, there is another side
of society seeking to celebrate individuality. However, schools are not always equipped to deal with this. Case-in-point the issue in Chicago of the transgender girl using the girl’s locker room. We can see from the current media items that social reform is a long and tedious process and this is true in schools as well, especially when we are basing students on specific standards and teaching to that middle 80% in order to generate the largest amount of product. Regardless, it is possible to teach a lesson that offers differentiation without straining our time and resources.

When we give some power to the students and let them choose certain aspects of their work, I find, students have a stronger sense of ownership to the task which leads to greater motivation to being successful in the lesson. Using technology, we can give students even more opportunity to collaborate as well as teach them how valuable a resource technology can be when we are in the process of learning. In teaching to the individual we ultimately reach more students. While that lower 10% will still struggle, they now have the opportunity to improve rather than drown in content they cannot follow. The high 10% are now challenged and can continue making progress beyond what we can cover in a single class period. Teaching to individuals through differentiated instruction, by using technology properly, and when we create a classroom environment that allows individuality, we create opportunity for all students to achieve success.
Bibliography


