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Reflection/Research Paper

My Master's Journey in Educational Technology at Boise State University

Introduction

My journey through the M.E.T. program at Boise State University has been one of learning and reflection. I've learned many things that I had never considered to be important in education that I did not expect to learn in an educational technology program. These areas enlightened me and helped me improve my teaching practice. For example, I've learned the importance of evaluation in any educational setting even if it doesn't involve technology.

I've been able to develop many instructional materials that I use on a regular basis when teaching my courses online. The technology and coding skills that I've learned are something that I use on a nearly daily basis when I post announcements, update my profiles and other aspects of my digital footprint.

I have been able to explore the many intriguing educational potentials of social media and design courses that incorporate social media elements and applications into them. Social media has been an area of extreme interest in my learning and my studies and research tended to focus in that area on many occasions. In fact, the ability to focus my learning within the context of the coursework is one of the biggest assets to the M.E.T. program.

My biggest area of focus and research has been in the formation of community in the online classroom. I currently teach online courses at Idaho Digital Learning and most of the course content is already created. The materials and activities are designed already. But they don't often include activities that facilitate the creation of the community. That is one area that I have been able to incorporate and the M.E.T. program has allowed me to research and develop many activities in that area that I have found useful and beneficial to my students.

There is a lot to reflect upon as I finish out the program. The learning has been intense at times and a lot of fun most of the time. I've been able to create a network of peers that I still interact with on regular basis that have helped me develop and hone my skills. It's been a great program and, in many ways, my completion will be bittersweet.

Lesson One: Reflections on Learning

During my undergraduate work, I learned about the theory behind learning, the psychology behind learning, best practices to help students learn, and how students learn. Many of these concepts were expanded upon during my work in the M.E.T. program. I learned about how technology can assist in all these areas as well. As my career shifted from face to face instruction in a high school setting, to corporate training of adult learners, I found that most of these same concepts were similar and just as valid for adult learners.

One stark contrast between my high school experience and teaching adult learners was how the students interacted with each other. In a high school classroom, in most instances, students already are familiar with each other. They know what to expect from peers and

classmates and often, they have heard what to expect from teachers as well. They come to your classroom with a pre-existing comfort level and knowledge of each other and the situation.

As I trained more and more classes of adults I noticed that these students didn't have any of those factors. Often, the adult students ranged widely in age and life experience. They didn't already know each other and didn't already have the bonds of community that years of attending school together often instills. As a result, they didn't immediately interact with each other and seemed to have their self-defense mechanisms in place. They were often quiet and shy. They seemed nervous and serious. Having gone through the same process as they did when I started my employment there, I could empathize with what they felt.

It was during this time that I came across the concept of community in online classrooms in the M.E.T. program. I found that much of the same circumstances that online learners undergo were present for my adult learners as well. They did not have the sense of community and comradery that high school students that know each other before class starts have.

My future plans included teaching online and this was an integral concept for me. I was able to explore it in-depth in EDTECH 504. I had a pretty good understanding of how students learned and what the best practices were, but the concept of community was one that was not explored in my undergraduate training. Chapman, Ramondt, and Smiley (2005) state that learning "takes place within a social environment that encourages reflective dialogue and collaboration" (p. 222). Students learn better in a social setting. A strong sense of community creates a social environment. A strong sense of community encourages reflection and collaboration. All types of learning is enhanced by a strong sense of community. As I worked through my courses and trained more classes of agents, I started taking concepts about the creation of community from my M.E.T. courses and applying them in my classroom. I started taking time to specifically create activities that didn't really have much to do with content but encouraged my students to interact with each other, get to know each other, and discuss things with each other. I incorporated light-hearted competitive activities to encourage team-work and trust. The classes that I started doing this with seemed to be more at ease with each other. Their weekly assessments seemed to go smoother and I had fewer agents need to retake their exams. This is, in part, due to the sense of community. I saw students helping each other and seeming to care more about each other.

It was an enlightening discovery. I realized that not only do students need to have appropriate content presented in a manner that was conducive to learning such as considering the different learning modalities when designing instruction, building in scaffolding and support, and using appropriate message design principles, but they also needed to have a conducive environment in which they feel safe and comfortable putting themselves out there by answering questions and, as a previous professor used to say, taking a risk for the sake of education. Conrad (2002) states, "The creation of online community is key to the creation of a successful learning environment". This concept has become core to my teaching style and practice especially in my current position teaching online. My students come to me from all over Idaho and from many different face to face schools. They don't know each other and they have the same sort of defense mechanisms in place that my adult learners had. I've used many activities that I created for my trainees and adapted them to meet the needs and serve the same function in my online courses. While the sense of community may not be as strong, it does help to create a safe and supportive learning environment. My students interact with each other and engage with each other in discussions and critique of peer assignments and are generally helpful of each other.

Lesson Two: The Art & Science of Teaching

Teaching is difficult. It involves capturing attention, keeping attention, and helping students learn. There is a science to teaching that involves knowing what materials and information to deliver to students and in what manner is most efficient. Research informs out practices and data about student performance influence what activities we teach and how we deliver them. While the science helps determine what materials and resources to use, when to use them, and how to deliver them, there is an art to it as well.

The art involves knowing what to say to get through to students. It involves knowing how to say it to have the most impact. It involves quick thinking to respond to situations. I call it an art because it is. It involves knowing your class and your students. It involves knowing the community of the class. It involves knowing when to step back and let the natural things happen.

In the MET program, I've learned that those spontaneous things that link students together and let them bond is important. The sense of community they develop allows them to trust each other and learn from each other as well as from the instructor and the curriculum. Through this community, students help each other understand and learn.

Teaching requires that those opportunities for students to assist and learn from each other be embraced when they arise. I saw how students interacted with content and how much more learning happened when they interacted with each other at the same time. In fact, my planned, structured group work often had less of an impact than the impromptu sessions that arose naturally in the classroom. The students formed a community amongst themselves and, when given the freedom to grow, they prospered and learned.

One area in which community is built in a face to face areas is to achieve a common goal through teamwork and shared experiences. This seems true in the online environment as well. Dianne Conrad (2005) conducted a study designed to measure the sense of community in an online cohort course. Conrad (2005) found that "the notion of working together for a common purpose was explicitly stated in two thirds of the responses" (p. 7). When learners feel like they have worked together and shared experiences to achieve a goal, they feel that sense of community. Here the science backs up the art of teaching.

At Boise State, I learned that these opportunities don't always arise naturally in the online classroom. In the traditional classroom, this sense of community often develops naturally. Students see each other and talk with each other almost daily. They are often part of the same physical community since they attend the same school. Often, they have known each other for months and years before the course starts. The typical online course does not share any of these factors and the students typically don't know each other at all. Reeves et al. (2015) state "due to the time and space separation, learners may have few opportunities to interact with their instructor or classmates in online environments" (p. 2). This further hinders the formation of community online. As a result, steps must be taken to kick start the creation process.

One way that I've attempted to do this is with the use of icebreaker activities. These are things to do at the beginning of the course that allow students to interact with each other and get to know each other. McInnerney and Roberts (2004) writes that "the deliberate design and inclusion of a 'forming' stage, or 'warm-up' period, incorporated as an essential component into the course structure" (p. 73) is required to help build the community. These icebreaker activities serve this purpose.

I've found that these activities work best when they are exclusively designed to let students get to know each other and not really focused on any course content. I've used introduction discussion boards, discussion based games that require students to analyze a situation and respond to each other, and other game-like activities that offer some fun and help to break down the digital wall that everyone has in an online world. These types of forming or warm-up activities do take time away from the content of the course, but it is essential that they are in place so students will be more at ease and feel that sense of community that is required to maximize learning.

Lesson Three: The Design and Evaluation of Instruction

As an undergraduate, I studied how to create curriculum and lesson plans in a traditional classroom. The setting included textbooks, overhead projectors, PowerPoints and me talking. It included group work, writing with pen and paper, and live discussions. Lessons were delivered in chunks with time to practice and overarching unit themes were divided into smaller segments. I created my own curriculum and decided what materials for students to read and what activities for students to complete. Synchronous lessons were delivered daily and served as short intro's and jumping off points for individual and group activities. Students had access to this content in a live setting and could only interact with it during the live session in the classroom.

This model served me well for my student teaching and first two teaching positions. Even though the curriculum was mapped it was only a general overview. I still had a lot of control over what was taught and how I assessed student achievement. My focus on the design of instruction mainly focused on what to say and how students can practice and learn.

The EDTECH program changed my perspective on the design and evaluation of instruction in many ways. It opened my thoughts to not only deciding what to say and how students can practice and learn, but also about how to say my message, what types of information delivery are best, and how to evaluate my own instruction. I started looking for ways to innovate my classroom and my learning activities. Web 2.0 and social tools became an active area of interest which led to the inclusion of blogging into my senior English course in Wyoming. The blogs were used for students to reflect and comment on their peer's reflections. I started designing lessons that were more inquiry based with reflective components. Blogging interested me since I was trying to get students to be more reflective of their own writing. Hew and Cheung (2013) state, "the use of blog appears to have a positive impact on student writing and critical thinking ability" (p. 55) so this seemed like a good activity to incorporate into my class. The class was small but the reflection and user comments led to positive experiences reported by all students when discussing the project and the final writing produced in this unit.

As I shifted my focus to learning about online teaching, I started to look at the design of instruction in a different manner. Not only did I have to consider what to say, but how to deliver that message as well. The traditional models of textbook and PowerPoint don't have the same effect online. Plus, it's not taking full advantage of the wealth of quality tools and resources that are available today. Most online courses are asynchronous which offered a challenge to me to develop as it was outside of my experience. I learned about message design and different learning channels in EDTECH 504. I also learned how to find and evaluate resources to use that matched the message that I wanted without me being there to fully explain and discuss it. This concerned me since I felt that I needed to be available to students but didn't know how to go about this online. I started to research the use of Twitter for this purpose. I felt Twitter might be

an ideal medium for immediate communication with students. It is public. All Tweets are accessible and recorded. Plus, students were already using this. According to Tang and Hew (2017), “Since its inception in 2006, Twitter has opened up a new channel of information dissemination, and has seen tremendous user growth.” (p. 97). This seemed like a channel that many students would use without much need for instruction on how to use the technology. It also seemed like a technology that might be fun for students to use or something they might be excited about. Tang and Hew (2017) also reported “the majority of studies reported positive learner comments towards interacting with Twitter” (p. 105). It has worked. I maintain a Twitter account specifically for this purpose and make use of hashtags for each different course that I facilitate.

As I learned about these new concepts, I started using materials that I created in my courses in my classroom. I used design principals that I learned about in EDTECH 502 to create an assessment that my district incorporated into the Body of Evidence based assessments that were used to determine if students met the criteria for graduation in Wyoming. It involved structured activities with a good balance between text and image channels and messages. This project also was the start of my experience in formal evaluation of instruction and assessments.

Although, I would continue to learn about evaluation and its importance, this was the first time I had experience with the process in a non-academic setting. The assessment that I created underwent formal review. The review process included discussions, revisions, and evaluations of the learning objectives and outcomes. The process took four months with monthly review meetings of the language arts curriculum committee. This was an important process. I had never looked at evaluation in this manner before. My evaluations before this included looking over my lesson plans and thinking about how best to deliver them. After delivery, I would undergo some internal reflection and make changes that seemed appropriate. I never used formal evaluation of any material that I was using. This process and my courses that involved evaluation methods and concepts helped me develop strong evaluation skills that I have been able to use multiple times in my professional practice both in the education world and in the corporate world.

Lesson Four: Networking and Collaboration

The M.E.T. program has provided me with many opportunities to collaborate and build a network of connections creating a personal learning network. I also discovered communities of practice in the program. I think that this is one of the most important concepts in my teaching practice. It’s important in any field, but I feel that it is almost an organically created in the education setting. Schools and universities are divided into colleges and departments. Educators see each other and share ideas, develop concepts, and create curriculum. This leads to close working relationships and better experiences for students.

In the M.E.T. program, I gained a fuller understanding of what it means to network and many opportunities to collaborate with peers, colleagues, and instructors. Networking involves making contacts and finding common ground to enhance my own learning and gain new ideas from others in my field. These connections also can lead to the creation of a community of practice and a personal learning network. These communities and networks are important. I’ve found and cultivated relationships among fellow students and instructors that I still benefit from today. It’s also prepared me to establish these same types of relationships in my current position with Idaho Digital Learning. While networking and collaboration take place in face to face environments through the education system, it’s more difficult and harder to accomplish in a

virtual school. Distance and lack of a regular meeting through communal locations make it less likely for these networks to develop naturally. The steps required are different in every situation but the importance and benefits cannot be denied.

Often, communities of practice form when people have a common goal or profession such as a group of English teachers. Collaboration happens often in these groups as each member learns from each other, but it is important for each member to be active and committed. Echkert (2006) states, “Two conditions of a community of practice are crucial in the conventionalization of meaning: shared experience over time, and a commitment to shared understanding” (p. 683). This is important because if members are not active and engaging each other, the community will fail.

In my position with Idaho Digital Learning, we have over 50 instructors in the English department, but most of us only communicate during the annual summer conference. This year, as a group, we discussed ways in which to be more engaged, connected, and active with each other in our community. Much like the establishment of learning communities in an online classroom, professional networks like this need additional steps to form and thrive.

In my experience in the M.E.T. program, this type of community and collaboration is best supported by immediacy of access. When we work together in a physical building, we have immediate access to each other. When I taught in Wyoming, I could walk down the hall and discuss anything with my fellow teachers. We shared best practices and advice. We had a common goal of helping students and we often discussed students with the intention of better helping them learn. In a virtual school such as Idaho Digital Learning, that isn’t possible. Communicating with each other does not develop spontaneously as you pass by a colleague’s classroom since we are not in the same location. It is deliberate and with a specific purpose.

How to create that same level of access is the question. There are many possible solutions that might work but the need for this is the key. One possible solution that I’ve been exploring at Boise State is the use of social networking and Web 2.0 applications like Facebook and Twitter. Gunawardena et al. (2009) states that “Web 2.0 tools foster interaction, collaboration, and contribution. An essential feature is user generated content enabling sharing, co-creating, co-editing, and co-construction of knowledge reflecting the collective intelligence of the users” (p. 5). Using these tools allows for colleagues that are separated by vast distances to interact and collaborate as if they could just walk down the hall. In my opinion, based on experience at BSU in EDTECH 543, the best way to achieve this is with an application that delivers notices to a mobile device when someone posts a new thought to the group. In EDTECH 543 we used a Facebook Group. I was notified often of new comments and postings. I was engaged and participated because the access was immediate. This is important and often encourages discussion and refinement. I proposed a similar type of group application called BAND to my department and am hoping that it can be incorporated soon.

Lesson Five: The Research-Practice Connection

Research is a key component of any successful educational outcome. As an undergraduate, research meant finding support for my claims when writing persuasive essays, or reading literature and finding specific quotes that support my thesis about why a character acts or behaves in the way that they do. It was a way to prove a point and support my ideas. I used it to back up my ideas but not change my practice. But that was what was expected of me. I was a student and learning. It is important to be able to support your claims or analyze literature and

it's important to be able to synthesize other's ideas and attribute it back to them. That was research to me before beginning my professional teaching career.

As a teacher and a graduate student at Boise State, my concept of research has broadened. It still encompasses everything I just discussed, but it is more. It's a tool to broaden horizons. It's a tool to evaluate instruction. It's a tool to determine if and what type of intervention is needed. It's a tool to guide my continuing learning and education. My first experience with research after earning my teaching certificate involved the use of data collection testing of my students in Wyoming. They took a MAPS test three times per year and the data from their scores was analyzed by the English and Math departments. We could see trends in areas that might need additional instruction because all students (or the majority) might be struggling with it. We were also able to group students into skill levels and develop activities to help build their skills that were appropriate to their current skill level. We also used the data and subsequent data sets from each iteration of the testing to evaluate if the measures we took based upon previous data was effective and to make changes as needed as well as track student growth and learning. We used similar methods when I was an instructor with the Idaho Virtual Academy. We were able to develop tools and activities to help students achieve in areas that seemed to need instructional support.

Through the use of data and analysis, we are able to modify our instructional materials, teaching practices, and intervene with students that were at-risk and struggling. Marsh and Farrell (2015) state "when enacted properly, DDDM [Data Driven Decision Modeling] should affect teachers' classroom decision making and subsequently student success" (p. 223). I discovered how important a tool that the data is and how effective it can be when used properly. Students that we targeted in the lower skill range all improved their reading comprehensions scores based upon the intervention activities like guided reading groups. I was also able to evaluate a project in my corporate trainer position as part of EDTECH 505. We collected data and analyzed it in the evaluation of the project. This type of research is integral to creating instruction and processes in iterative fashion so that is a constant process of improvement.

Another facet of research that I have come to accept is that formation of new practices based upon research and studies conducted. I have been able to review extensive research and many studies in the formation of online community and how beneficial it can be in the classroom. The research that I reviewed had some pretty clear conclusions. Community is important but it doesn't develop naturally in the online classroom. I have been able to incorporate many ideas and concepts into my online courses that help build this community from the research that I've reviewed in my courses in the M.E.T. program.

Research continues to inform the professional development practices of many of my colleagues as well as myself. They choose courses and areas of interest to continue learning and honing their teaching craft. Professional development, besides being a mandated requirement in most states, is important. New theories, technologies, and practices emerge based upon research and it's important to continually develop and hone our content knowledge and teaching skills. The concept of professional development was not touched upon in my teaching courses during my undergraduate studies. I find it important to stay up to date on current teaching and learning research and professional development offerings at my state universities and through Idaho Digital Learning help me do this.

Closing Thoughts

As my time at Boise State comes to a close, I realize that it has been an incredibly beneficial experience and has contributed to my growth as a professional and as a teacher. I come away with it with knowledge and practices that have and will continue to benefit me and my students.

I've been able to develop my passion for technology at Boise State and find ways to merge that passion with my other passions in life--teaching and writing. My coursework has allowed me to gain a general understanding of the field of Educational Technology as well as focus my areas of interest into Instructional Design and Technology Integration with a focus on online learning and bringing online technologies into a blended and traditional classroom environments. Overall, it's been a great experience and I have developed many skills and interests that will serve me well in my future career endeavors.

In addition to a master's degree, the M.E.T. program has granted me a Graduate Certificate in Online Teaching and an Endorsement for Online Teaching in the state of Idaho. It has also afforded me the opportunity to work with some great faculty and staff, in which I learned a lot. I also participated in an online teaching internship with Idaho Digital Learning that led to employment in that great organization that I still enjoy today.

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