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Reflection/Research Paper

A Change of Perspective

Introduction

I distinctly remember my first “online” learning experience. I was enrolled in a distance program through the university in my home town, and one of my courses was only offered through webcam. Webcam technology was new, and the students enrolled in the course had to gather in a classroom equipped with a webcam, television, and speaker/microphone system. The instructor taught the course at his campus approximately 100 miles away, and we watched him teach the course using the television. Only one speaker/microphone system functioned, so 15 people sat around one table near the back of the room. The experience was difficult, to say the least. There was an online learning management system, but laptops and Wi-Fi were not commonplace yet, so the online portion of the class had to be completed from home. I often thought “There has to be a better way to do this.” It seemed like this course was just another “hoop” I had to jump through to reach my final goal of becoming an educator. I was a frustrated student.

At the end of the semester, I fell ill and had to choose between work and my education. My health needed my primary attention, so I chose to continue working. As the years went by, and my medical condition improved, I found myself wanting to return to school to finish my Bachelor’s degree in Elementary Education, but money was a significant problem. It would be nearly four years before I could return to college, and

my perspectives on learning had changed dramatically. My father had passed away, and his sudden death had transformed me. I wanted more from life than simply being content; I wanted to make a difference.

My perspective on learning had changed from a necessary part of life to an integral, and perhaps one of the most important, reasons for living. My return to higher education contained online courses that helped ignite a spark within me, and I knew technology and learning were meant for one another. Although I enjoyed teaching elementary school, I struggled to incorporate technology into my classroom in meaningful ways. I often had ideas that I thought would work for my students, but I did not have a strong enough foundation in learning theory to understand what was going wrong. I recognized that almost every educator around me also struggled with technology integration, so I decided that I would learn everything I could about educational technology, online teaching, instructional design, and learning theory.

The Masters of Educational Technology (MET) program at Boise State University has helped me bridge the gaps I had regarding learning theory, course design, and effective technology integration. My confidence in my abilities to teach others about educational technology is a direct result of the exemplary education I have received. The journey from the frustrated webcam course student to lifelong educational technology enthusiast is reflected in the lessons described throughout this paper.

Lesson One: Reflections on Learning - Transformative Learning

Throughout my coursework, I often found myself reflecting on my own education experiences as both a student and an educator. I noted that many of the most important lessons I had learned about life and learning were related to significant events

that had challenged my preconceived notions and perspectives. I wondered if this was a common occurrence, and had the opportunity to research and define what I had concluded. The “phenomena” I had stumbled upon was a well-known learning theory called the transformative learning theory. Transformative learning theory, described by Durant, Carlon, and Downs (2016), is “grounded in human communication that guides students in identifying prevailing frames of reference and then changing those frames via reflection on experience” (p. 2). Student experience and reflection is also a fundamental element of effective online course design. Stavredes (2011) mentioned that creating an online community of inquiry where students think critically, collaborate, debate, reflection, and engage in problem-based learning is intrinsically motivating, thus producing a transformative learning response.

I wanted to inspire the same type of transformative learning that I had experienced in my students. I had the opportunity to develop an online course on any topic, so I chose cybersecurity for beginners. As I designed the course, I continually thought about transformative learning. I wanted my students to have a change in perspective and behavior regarding online safety, therefore, I needed to challenge their preconceived notions. I decided to use a combination of personal narrative, narrative videos, and case-studies to invoke emotional responses. The learning tasks were meant to develop a community of inquiry where students collaborated, used higher-level thinking to solve problems, and reflected on their own cybersecurity experiences. The culminating task was to respond to a cybersecurity case-study by providing advice to the fictitious victim.

If I had been tasked with creating an online course prior to my knowledge of transformative learning theory and the community of inquiry, I more than likely would have downplayed the importance of student experiences and reflections. When students can share their experiences, and reflect on their learning, they "can grow as self-directed, independent learners who are in control of their own learning" (Stavredes, 2011, p. 113).

Lesson Two: The Art & Science of Teaching - The Joy of Learning

Most educators want their students to enjoy learning. Even before beginning the MET program, I was always trying to think of new ways to make learning an enjoyable experience for my students. I would often come up with "one-size-fits-all" solutions to make things "fun", such as using a new web 2.0 tool to design a review game, or "flipping" a subject and placing the content on Moodle, but there was always at least one student that seemed to be less than enthusiastic about my new approach to having fun while learning. After researching gamification in education, I now look at fun and learning with a different perspective. I have stopped looking at the art and science of teaching through the educator's lens, but rather through the learner's lens.

One of the reasons why gamification resonated so strongly with me is because I am a casual gamer. I enjoy the thrill of competition, the "flow" of playing the game, and the learning that seems so effortless. I remembered some of the video games from my past that I had stopped playing because the menus were too complicated, or I had to focus too much on the design and navigation, thus preventing me from enjoying the game play. I then thought about my learners, and realized that they probably experience similar problems in their educational lives, too. Luckily, I learned about flow

theory and cognitive load theory, and have started to consider these theories to make learning more enjoyable.

Cognitive load theory is comprised of three categories: intrinsic, extraneous, and germane (Artino, 2008). Intrinsic cognitive load refers to the simultaneous processing within the working memory to build schema and is dependent on learner experience (Artino, 2008). Extraneous cognitive load is the focus learners have to give to the instructional design that does not pertain to the actual content (Artino, 2008). Germane cognitive load, also called effective cognitive load, is the reduction of extraneous cognitive load and the building of schema with consideration to the level of content difficulty (Artino, 2008). Flow theory is described as the experience of perfect balance between the learner and a challenge (Kapp, 2012). If the learner has the appropriate amount of skills and abilities, all the learner must do is avoid distraction, concentrate, and work hard to achieve the task (Kapp, 2012). I wanted my students to lose sense of time when completing a task, versus continually looking at the clock, or doing the bare minimum. But, I was not going to achieve this desired level of "fun" without considering cognitive load theory and flow theory.

My teaching theory schema allowed me to redesign lessons I had previously taught. One such lesson was surface area and nets in my sixth-grade math course. I had the background knowledge that every one of my students had played Minecraft before, which was important to reduce extraneous cognitive load. I determined that I could use Minecraft to build a small house, cover the house with vines to determine surface area, and then allow students to do the same. Additionally, I scaffolded problems where the students would experience germane cognitive load. It was inspiring

to see so many of the students achieve flow while learning at their individual levels. This experience has transformed the way I view the enjoyment of learning because I now consider the learners first in every teaching experience I create.

Lesson Three: The Design and Evaluation of Instruction - The Learner's Lens

Online learning can be a daunting experience for learners regardless of prior educational background. Throughout my coursework at BSU, I was reminded of the need to focus on the learners' perspective of the learning environment. Although this was not a drastic change for me, given my natural inclination to constructivist-based teaching methods, I found the many ways online educators enhance the online learning environment to be quite intriguing. I specifically focused my efforts to create videos and presentations that were engaging and promoted active learning.

Videos and presentations should be designed with the learner in mind, and the many multimedia principles I have learned help streamline the "educator-to-learner" content delivery message. The videos and presentations I have created have been text only or narrated depending on the difficulty of the instruction. As noted by Schweppe and Rummer (2016), graphic-based presentations should be narrated to improve germane cognitive load and long-term learning. It was only after I learned about the multimedia principles that I began to see many of these principles in action in many of the videos and presentations I use in my day-to-day life. Additionally, I can now look at the content choices I have selected with a careful eye regarding alignment with appropriate multimedia principles.

Videos used in online courses can alleviate some of the concern online learners may have regarding the lack of face time with an instructor. Sherer and Shea explain

that today's students, specifically the "Millennial" generation, "expect that teaching and learning will be more interactive, collaborative, and experiential" (2011, p. 56). Therefore, it is up to the instructor to meet the students "where they are" in terms of technology-based learning. The videos and presentations I created during my MET experience are varying in technology skill level, student schema, and interactivity. All of them have the same goal, however, and that is to engage the learners and promote active learning.

Lesson Four: Networking and Collaboration - Share What You Know

My experience as a face-to-face educator provided me with many opportunities to learn from educators in meetings called Professional Learning Communities, or PLCs. While these PLCs were valuable, they did not encourage me to branch out and work with educators from different communities. The MET program showed me the many ways educators share and learn from one another online, specifically through blogging and Twitter. In fact, I used to view reading blogs and using Twitter as a waste of time, but now I view them as valuable learning tools.

Twitter has become a popular informal way for educators to communicate with one another. A recent study conducted by Rehm and Notten (2016) concluded that educators using Twitter to engage in "hashtag conversations" improve not only their social capital, but also their access to information that may not be easily available within traditional PLCs. I have sought out many educational technology-related hashtag conversations, and have shared my own reflective blogging on Twitter. My networking experience has put me in contact with educators from around the globe, including content developers, online course designers, and classroom teachers. Many of them

include me in their weekly tweets regarding their top contributors, further increasing my social capital and potential learning opportunities.

The practice of keeping a learning log, or blog, and sharing my reflections with other practitioners has transformed my practice. In fact, Killeavy and Maloney agree that "developing a reflective approach to practice is now viewed as one of the key activities in the development of the professional" (2010, p. 1070). The experience of maintaining a log of my learning endeavors, along with sharing artifacts I have created, has proven to me that reflection is essential to my development as an educational technology professional. I plan to maintain my learning log on a weekly basis, along with sharing the posts on my professional Twitter feed.

Lesson Five: The Research-Practice Connection - Community of Inquiry Framework

Prior to my enrollment in the MET program, I often heard "best practices" thrown around without reference to the research behind the best practice. In fact, I used to consider anything anyone from the educational world said was fact, and I did not care to research many of the topics on my own. The MET program has shown me the direct correlation between research and practice. One example of my newfound research and practice mindset is the research I have conducted regarding the Community of Inquiry (CoI) Framework.

The CoI Framework was a portion of my education in one specific course, however, I researched the framework independently to transform my future online teaching courses. During my research, I found out that the CoI Framework is effective in a wide range of programs, such as an online research-based postgraduate nursing

course. In fact, the evaluation performed by Mills, Yates, Harrison, Woods, Chamberlain-Salaun, Trueman, and Hitchins (2016) found an increase in learner satisfaction in courses that use the CoI Framework. Another study conducted in Sweden yielded similar results, and the evaluators further noted that that "designing online learning environments with regard to the affordances of new technology to optimize online interactions is important" (Saadatmand, Uhlin, Hedberg, Åbjörnsson, & Kvarnström, 2017, para. 29). I then used the research I performed to develop various graphics as part of a unit of instruction for my graphic design course.

I recently interviewed for a position as an e-Learning Instructional Designer at the university in my town, and I mentioned the CoI Framework as an approach to designing and delivering online content. The team I interviewed with was intrigued, and I was offered the position. After further discussion with my team members, I was informed that online student engagement is a major concern of the University's educators. I plan to share the many graphics I have created regarding the CoI Framework with the educators I will be assisting, as I have seen the CoI Framework in practice from both the student and educator perspectives. Additionally, I would like to work with a small group of educators to help them implement the CoI Framework in their courses. The process would include instructor and learner evaluations, and would help our team "practice" using this learning structure before implementing it in all courses.

Closing Thoughts

The change in perspective I have gained throughout my MET experience has proven invaluable. I have been lucky to obtain my dream job as an instructional designer because of the artifacts and content I have shared with other education

professionals. I am no longer the frustrated online student I once was, and I plan to always remember my transformation process as I assist instructors with their instructional design needs. The learner will be central to every instructional design decision I make.

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