



LEARNING, DESIGN, AND TECHNOLOGY CAPSTONE

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My ultimate reasoning for obtaining a Masters in Learning, Design, and Technology was to be able to finally have the educational background to complement what I have already been doing in my professional role since 2018. I decided early in the program that success would be measured by my ability to take back things that I've learned from each of my courses and apply them to my own professional role. I am proud that, based on my own measure of success, this program was completely successful in meeting that threshold.

While I had many final projects I could highlight for my capstone, I decided to focus on my projects from LDT 415A, LDT 440, and LDT 527. I chose these projects because of the significant impact they had on my professional role and their successful implementation within my program.

To begin this capstone, I want to focus on my final project for LDT 415A that was focused on creating a facilitator training that could be applied to my new facilitators who join my program to teach them how to teach using Technology-Enabled Active Learning, plus STEAM (TEAL+) with their students. This was a training that we'd been wanting to create for several years, but we hadn't created anything formal. Being tasked with creating an online training for LDT 415A gave me the perfect opportunity to create this training for my course while also ensuring that it could be implemented within my program to address a need we had not yet been able to fill.

The focus of this final project was to be able to utilize all of the elements of instructional design, such as setting learning objectives and being able to map out how to create a training course that fully addressed the needs of my program (Dick et al., 2021). With the feedback from my top facilitators in Zimbabwe, my professor, and classmates, I learned how to create a meaningful pre-test, training course that could meet my training objectives, and also a post-test to ensure that my facilitators were able to show mastery of the TEAL+ model. Creating my facilitator training course truly taught me that instructional design is much more than simply organizing content into a single document. It allowed me to see how all of the different components come together behind the scenes to create a meaningful training experience. I now have a much better understanding and respect for online training courses and how I can identify ones that have a single thread of truth throughout to follow instead of multiple components that should have been broken into their own separate trainings.

I am proud that my Facilitator Training course was implemented in late 2024 and continues to be utilized as we welcome new facilitators into our program. This was the first opportunity for me to see how what I was learning in the Learning, Design, and Technology program could have a direct impact on my professional role.

The second project I am showcasing is my final project from LDT 440. The goal for this project was to find a tool that could be integrated to solve some sort of problem of my choosing. Once again, this project was very timely, because the most important priority in my role at that time was to build a student tracker that could help us predict when students would be ready for apprenticeships during our program. We had previously tried using other methods to do this, but they failed because they were either not user-friendly or were only stored locally on someone's computer, making them difficult to scale. My LDT 440 project allowed me to take the time to research the correct tools needed to solve this problem, which allowed me to land on using Google Sheets and create a formula using ChatGPT that would help us predict when our students would be ready.

I was able to prove that Google Sheets was the right tool for the job because of the RIPPLES model that I learned about in LDT 440, which allowed me to focus on what resources were needed, the infrastructure required, the people that would need to be involved, the policies that needed to be addressed, how the tool would enhance learning, and then finally how we could evaluate success to prove that Google Sheets was the right tool, as well as be able to identify what support was available using Google Sheets (Surry & Ensminger). By addressing each of those components, I was able to prove that Google Sheets would not only meet our requirements, but also be flexible enough that it could scale as we continued to add more students to our tracker.

Oftentimes in education, we see people start with the tool itself and then search for the problem it is trying to solve. But because of the RIPPLES model I learned in LDT 440, I was able to change my perspective and instead be better equipped to find the right tool for the problem rather than approaching it the other way around. This will allow us to be more purposeful with our time and resources when it comes to solving the issue, which is important when those are not endless for us.

Since implementing the student tracker, we've inputted almost 40 total students to track their progress since last summer. The tracker has allowed for us to accurately predict when students would be ready for an apprenticeship, and it also allowed us to get visibility into where in the program our students were at a glance, as well as see which students may need additional support. The different phases within the Google Sheet also allowed us to issue Credly badges based on the completion of different phases, which allowed our students to showcase their progress on LinkedIn. This project continues to be used on a daily basis and has had an incredibly positive impact on our program.

The third project that I chose to incorporate into my capstone is my final project from LDT 527. For this project, I was determined to help establish a learning community where my students would be able to learn from each other. To do this, I proposed building a wiki that

would support learning transfer among my students (Cress & Kimmerle, 2008). The best way for someone to show that they understand a topic is for them to explain it in their own way. Not only does this allow them to understand the concept at a deeper level, but it also allows them to share that knowledge with others in their own way. Being able to use the wiki structure for this allows students to take ownership of their own knowledge and create information in their own words.

After learning about the power of learning communities and learning transfer, and how wikis are a wonderful way to achieve that, I knew I had to bring that into the fold of my program. I put together this proposal to justify implementing our own internal wiki that would be owned and run by my students so that they would be able to practice the internalizing and externalizing of knowledge (Cress & Kimmerle, 2008).

By implementing our own internal wiki, we now had a way for our students to take an active stance when it came to their learning that not only helped them better understand all of the concepts that we covered for themselves, but it also allowed for that knowledge to be spread to our other current and future students to help them along in their own journey. It gave my students the ability to take on that ownership and allow them to organize information in their own way, as well as communicate that knowledge in a way that makes sense within their own community. I am pleased that the wiki has not only been flourishing, but one of my students even [created a training video for new students to be able to watch so that they can learn how to use the wiki](#).

Going into the LDT program, I wasn't sure how it would impact my current thoughts and experiences when it comes to teaching students in the classroom. But after completing the program, I am thrilled to realize that what I learned in LDT directly supports what I have been doing in the field for years. The focus on student-centered learning and the importance of having teachers take on the role of facilitator is directly supported in every class that I have taken within the LDT program. Being able to share my lived experiences with my classmates and being able to talk about my program using the best practices we read and discuss in class was something that has made my professional role even more fulfilling than it already was.

Throughout the program, I discovered that my educational philosophy aligns closely with constructivist and student-centered approaches to learning. While I entered the program hoping to learn new strategies and frameworks, I found that many of the concepts discussed throughout the coursework validated practices that I had already been implementing within my own program. The difference was that I now had the theoretical foundation and research to explain why those approaches were successful.

Across all three projects, a common theme emerged: meaningful learning occurs when learners take ownership of their learning and educators create environments that support exploration, collaboration, and reflection. Whether designing facilitator training, building systems to support student growth, or creating opportunities for collaborative knowledge building through a wiki, each project reinforced my belief that technology should support learning rather than drive it.

I believe students learn best when they actively construct knowledge through authentic experiences, collaboration, and reflection. Likewise, I believe educators are most effective when they act as facilitators who guide learners through meaningful experiences rather than serving solely as content experts (Bransford et al., 2000). By helping teachers move from the role of authority figure to facilitator, we create opportunities for students to develop highly sought-after skills such as collaboration, creativity, problem solving, communication, and empathy. These skills are increasingly important in today's workforce and align directly with the mission of the programs I lead.

Looking back on my time in the LDT program, I am proud not only of the projects I completed, but also of the lasting impact they continue to have. Each project addressed a real challenge within my organization, and each continues to be used today. The ability to immediately apply what I learned in my coursework to my professional practice made this degree exceptionally meaningful and confirmed that my decision to pursue a Master's in Learning, Design, and Technology was the right one.

References

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