

Program Synthesis Report

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Final Portfolio Review

University of New Mexico, Albuquerque

Organization, Information and Learning Sciences

formerly Organizational Learning and Instructional Technology (OLIT)

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1. The Mother of Invention

I came to Taos, New Mexico in 2004, after completing my undergraduate work in upstate New York. I had been studying Studio Fine Arts, Music, Poetry, and Global Cultures with an emphasis on Africana Studies. I was enamored with the diversity of the world's cultures, with music and art and the things that connect humanity. I was lucky enough to find an amazing job for a kid like me. When I was 22, I was hired at KTAOS Solar Radio and Five Magazine here in Taos. They were searching for creative people to develop marketing and product advertisements, handle design and layout of the magazine and perform general communications work. I didn't have a lot of background in these areas, but I was good at school, I could write well, and I was an artist so I had that creative thinking mind.

It took me a few years to become good at creating art that was also effective advertising. Fortunately, the people there were patient with me, and one major concept of the magazine was to literally think outside the "box" of traditional advertising with our designs, embracing that creativity. I fit in well there, but in the economic downturn around the end of 2008, I barely hung on to my job while everyone else in my department was slowly cut. I had to quickly pick up and put on the hats of my former teammates. Now, I was the editor, I was the art director, I was the project manager, I was in print production, web development and communications. I was also still responsible for the task of designing the entire magazine, cover-to-cover.

Working at the magazine allowed me to transform my creative fine art skills into creative design skills that could be used for marketing, promotions, and communications. I was let go in 2009 as the magazine folded; we just

couldn't hang on any longer. I was set free to wonder what the heck I was going to do next. In that time I was able to visit my family in New York, marry my husband, and take a honeymoon.

After almost a year of trying to make a go of a design business in a depressed resort town, I knew it was time to try something different. But having a young family, I really couldn't leave. I couldn't just change our lives. We weren't making much money. I checked in with the local UNM office and after a chat I was handed a brochure for OLIT by a counselor. I had never considered online education before, but I thought an online Master's Degree might be a great choice for a busy mom in a rural area. I signed up for Dr. Lester's Instructional use of Computer Simulations in the fall of 2010.

2. Simulations?

It's funny, but it was really a life changing choice. I didn't know if I would even like it. I didn't know if I would be good at it, but that was the astonishing part. I found out that the creative and computer design skills I had been building my whole life were well-suited to designing digital multimedia learning experiences; *I could be good* at developing a sense of real experience through a mediated one. It was eye-opening, to say the least.

One of the biggest takeaways from Simulations was that timely feedback is essential to the learning process, and in creating any automated or computer-mediated, or even face-to-face learning program, planning for feedback was a necessary element of any design for reinforcement of learning and learner motivation. Simulations was also the first time I was introduced to education theory, the role of Bloom's taxonomy and the use of ISD for developing effective instruction.

In the spring, I applied for admission to the graduate studies program and signed on for Kevin Brady's Instructional Multimedia. We were able to explore resources: read articles, watch videos, listen to podcasts, and learn about learning and how humans grow through exposure to information, and how many different ways we could effectively design the scenario for that exposure. I began to understand the true power of media. I gleaned how, as media designers, we can first imagine and then develop well-designed, user friendly systems to facilitate learning and understanding, by using our creative, design and communications skills and the myriad technology tools being released for consumer use. It also got me thinking about building the tools themselves.

I designed my final project in that course, a distance delivery system for a studio arts program. The concept was that underfunded arts programs could expand the capacity of a single instructor to teach a larger group of students who are physically distant from that instructor, and possibly one another, by implementing an online delivery using rich multimedia tools and an ISD approach.

The idea for the project was centered around an application, "The Simulated Sketchbook", designed to allow the instructor to draw in real time with a pressure-sensitive stylus on a tablet/touch screen device. The application would have options for pen style, simulating various brushes, charcoals and pencils held at various angles, widths, mediums, and a full color palette. The instructor could use a microphone to speak to students, and screen share his drawing work directly with students, either synchronously, or in a recording, asynchronously, so that he could be giving that lesson just like the students were in the classroom, and the students would see what the instructor was demonstrating right on their own monitor/tablet or other device.

Use of the hardware and software combined with an LMS or other web tools could complete course delivery, allowing image sharing (through scan and upload) and critiques held in discussion forums around the quality and nature of the student work.

I haven't created that application, but I believe in it, and I have seen apps that might be similar, but not with the same functionality or sensitivity. I would still like to partner up with the right people to develop it, because I feel strongly that apps like these could be used to improve learning. Arts education is important to human development, without it we are more prone to lack both the cognitive flexibility for creativity and the confidence required to suggest the "outside the box" thinking that leads to innovation. If we're lucky, it could also lead to more positive outcomes for our planet. Both courses were complementary to my skill set. They were good ways to try on the program.

3. The Lifecycle of Knowledge

After Dr. Brady's course, I enrolled in one of the organizational learning courses, 514 with Dr. Salisbury, and again, I was surprised. Here was a line of work that I had never considered, didn't even know existed, and certainly never thought would be of interest to me. Once again I found out that my creative skills really had applications here, too. What method is more effective to relay ideas in systems design and knowledge management, than the visual representation of how complex systems work? I found that using Cmap Tools open source software and other graphic programs would help me visually organize information that never really comes through clearly enough in written or oral format.

I actually quickly discovered that I was in high demand

as a group-mate, because I had such strong organization, editing and presentation skills. I could make concepts look and sound professional using design software on my Mac. These were skills that my colleagues did not usually have. They had great ideas; they were innovative, they were thoughtful and they had background in the context of the projects. What many lacked, was the ability to package a concept for presentation. I came to see this ability as priceless because *it was the packaging* of a concept that allowed it to be understood and “sold” to others, whether a client, a boss, or a consumer.

I found new confidence in my skills, even as I was embarking on content areas which were foreign to me. While taking Knowledge Dissemination and Application with Dr. Salisbury we learned to develop online work communities through MS Sharepoint software. Independent of the software, we explored the ideas of centralizing, cataloging and maintaining organizational knowledge and developing systems and processes to manage workflow to improve efficiency and productivity.

At the time I really felt I had no business experience or systems experience, but the readings provided in the course, Salisbury’s *iLearning* for one, and *Designing a Reusable Learning Objects Strategy* by Barritt and Alderman, along with some very good articles, actually held my attention, and taught me a lot about the importance of databasing/cataloging, and the appropriate use of media to deliver information where and when it is needed.

My time at the magazine gave me a small and rather low-level learning organization to reflect on. The three OLIT courses I took first gave me a broad base, but it was difficult to explain my course of study to others. I still wasn’t sure what OLIT really meant, or how it applied

to me even though I saw glimpses of things that excited me. I was not a corporate trainer or a software developer and so I still felt like I couldn’t see the big picture. While scrapping my way through 514 I was also getting to know the other side of OLIT, a very intriguing side, that certainly lit a fire in me.

4. Reason to Design

Culture and Global eLearning. This course made me passionate about developing ICT solutions to improve education across the globe. It touched my love of global cultures and engaged me to learn about several unique, often isolated, cultures from an ICT perspective, but also from a human perspective. It made me yearn to have a job like this. To use creative skills to design smart systems that work for the people, specific to their cultural context, and support their learning, health and success; their self-actualization. Rarely have I been such a contented student in studying hours at a time, gobbling up the plethora of articles on ICT analysis, systems of delivery, and cultural considerations in designing distance learning. It was also the first time I was introduced to the concept of mLearning, and the promise it held in underserved areas of the world and domestically as well.

The content of the course was fascinating, but aside from that, the design of the course was engaging and personally fulfilling. Dr. Gunawardena offered us all the elements of what I came to understand as the very best possible world of online learning. We had interaction with and guidance from her, meaningful interaction with the content, with ourselves in personal reflection, and, deeply, with others in group project work. She was practicing on us some of the models of distance instruction that I later learned about; cognitive apprenticeship and co-construction of

knowledge in a community of inquiry or community of practice; she incorporated eLearning best practices to make sure we felt supported, had feedback, and were motivated by those things, and our engagement in a group, to put forth our best academic and personal efforts.

This experience was an opportunity to ingrain the feeling of what a good online course in this format can be. I strive for this level of quality in designing courses and I could not have gotten to this level of understanding without her courses. I have not even mentioned the work we did.

Our group worked together all semester on projects, scaffolded to develop our skills and confidence with the subject matter, and then we were given a “real” complex ICT problems to work on. This is where I was introduced to the Ghana Project, which was ongoing at that point already for a year when my team stepped into the development process. A strong team of five, we dove into the design of a distance delivery system for Physician Assistant Training in Ghana through Central University College with our mentor, Dr. Ben Aflakpui.

Although difficult to reach for comment due to professional scheduling and access to technology in rural areas, it was Dr. Ben’s vision to reduce health disparities in Ghana, and Africa. Ghana has an extremely low physician-to-population ratio, and faces startling healthcare challenges. The research guided our team to develop a delivery design using smart phones, Moodle and face-to-face aspects bolstered by Lani’s distance education design pillars to make education accessible and motivating to medical professionals working in remote geographical areas of the country.

The real power of this project for me, was in its noble goals. For the first time I saw my creative gifts as

benefiting whole communities, improving education and healthcare for a region of the world. I felt that I understood where I fit, where my professional goals (even though I hadn’t thought of them as such) aligned, from micro to macro, seamlessly. Next semester I took Lani’s eLearning Course Design.

This course brought learning theory and online technologies into the forefront, and showed us how to take an ICT solution and create the pedagogical design to fit snugly into that unique puzzle. I was able to continue work on the Ghana Project by meeting another need; designing a faculty development course for Central University. Current staff have little to no experience in distance education practice or theory.

Planning this course in a group of three, based largely around the design we had developed the previous semester, we wrote a course outline, including face-to-face orientation activities, two modules in Moodle, a syllabus and various associated activities. We usability-tested the user interface, compared the course design to the school’s mission and vision, and attempted to develop quality assurance standards. While working, we learned about our own unique design perspectives through class discussions and reflective writing.

Two semesters’ work on this project continued into a grant proposal phase, an OLIT Expo Presentation, and a funded \$100,000 grant to develop the pilot course using the general design we had developed as an ICT solution. In applying for the grant, Lani approached Drs. Mohamed Ally and Agnieszka Palalas for their assistance in lending authority to our RFP. I had just finished Lani’s courses where I was reading the work of Dr. Ally with great interest, and I had the opportunity then to work directly with him, and have done so now over the course of almost a full year.

This sort of transition from theory into practice, reading into meeting, and vision to reality, has been an amazing journey which I never would have found without embarking in the OLIT program. To date, this is my proudest professional accomplishment, and I can only hope that I will continue to grow in this vein and find other applications for problem solving, creativity and cooperation across cultures and continents.

5. Creative Reassurance

The fact that OLIT has also shown me how to develop my business skills is a very big plus. Of all the organizational learning courses, Dr. Grassberger's Organizational Learning was easily the most beneficial to me. Dr. Bob was wonderful to work with, he listened very well to me and my colleagues, and he reached out in different ways. It was while working with him that I made my first trip to campus and shook hands with professors and classmates during "Coffee with Kevin and Bob".

He liked my creativity, he encouraged it, and applauded it, publicly and privately. My silly little illustrations of business problems were something he considered as successful communications pieces, and my way of sharing my mental model. He made me see that my brain and hand worked together and made knowledge visible to others in a way that was useful for learning. He made me connect the dots between Kevin's 505 - Salisbury's 511 and his Organizational Learning course.

My design could transmit information in a meaningful way, it was an alternative to text that many people could use to connect to concepts and knowledge. He demonstrated that successful organizations were only as good as their human capital, and how personal

investment and alignment to a vision was completely necessary for the growth and success of that organization and the retention of that human capital.

In our class project with New Mexico Kids Network we helped identify breakdowns in organizational communication at the management level which stifled progress for the dedicated field workers in the organization. Their feedback was often disregarded. Because management was unwilling to learn from its "ears on the ground", the organization as a whole was not optimized, lost productivity, and did not develop to its potential. Learning to recognize the cracks in the organizational pavement was a valuable experience. I used the tools from this course while evaluating Taos Academy's state of organizational learning and efficiency as part of my evaluation during my internship.

6. Power Term

Theory and Practice of eLearning felt somewhat like a review to me having taken it after Lani's two courses, but that was good because I took three courses that fall. I enjoyed Dr. Adams' style and her ideas about social learning, and developing a variety of environments to facilitate eLearning.

We used Second Life several times during the course to meet and do activities. We really had a great time, and I have what feel like "real" memories of flying, dancing, and learning with my colleagues, whom I never met, outside their avatar forms. I liked the use of journaling in this course to reflect on our experiences and readings and to support the reporting process for our complex learning problem.

My group and I explored ways to improve delivery and

organization at IDEAL New Mexico. We all became invested in what seemed like a wonderful distance education consortium, that had recently been hit by budget cuts and was adjusting to a diminished funding structure. Because it was struggling, we had a tough time evaluating improvements that could be put into practice, but we worked on mapping the design of the system using Cmap tools, developing recommendations for leveraging community resources for equipment, capital and instruction to replace the depleted funding streams.

The process of reviewing the literature on mLearning and developing the paper to support our project recommendations had its hiccups. I was pleased to have gathered the resources, explored them, and been able to synthesize the concepts into a successful first attempt. I was proud to have completed it.

That same semester, I also took the two cornerstones of the program, The Adult Learner, and Instructional Design; both of which I had avoided because I clearly had no idea what they were about. I believe, that the decision was a good one, in retrospect, not avoiding them altogether, but waiting until I had a solid foundation from my many other OLIT experiences actually gave me the opportunity to bring to them so much more understanding that they seemed to flow out of me in a confirming way.

I think that they both would have been much more difficult for me at the start of the program, sure, I could have used the knowledge to help me in other courses, but instead of Adult Learner as an introduction, having it as more of a culmination gave me so much more to talk and think about in terms of my own conscious learning process and development. I believe I learned some of the most important lessons about my passions and learning goals from the research and writing process in that

course after having experienced many of the others. I did not have background in education, training or even technology, outside of its very general or creative uses.

Instructional Design came at a time when I was ready to put my sharpened tools to work. I had the taxonomy down already and it seemed to unfold into a final product via the use of our two texts. One, a step-by-step manual, and the other, which contained more theoretical or conceptual basis for making decisions when designing instruction. At the end I felt a high level of confidence in my ability to design instruction that would suit the needs of the learners, (especially with the help of the texts) and I could incorporate cultural and ICT considerations and distance learning principles toward that end as well. At this point in my studies, I could have made the project from my 505 course come alive, as a subject matter expert, with the exception of developing that sketchbook application; though those skills are still on my long list.

7. Resolution

Finally, in my last semester of the program, I had Dr. Salisbury for Designing Knowledge Management Solutions, and Dr. Portzline for Program Evaluation. I was not initially thrilled to read *iLearning* again, but it did have more connections to my other program experiences the second time I read it. The other, very dense, book we used on Microsoft's KM systems, made for interesting reading, though I had a hard time applying it in the level of granularity which it was written and intended, so it is more a reference for the shelf, than for direct deposit into my knowledge accounts.

The project I worked on with a group mate with whom I had previously worked in 511 on a similar project (she had changed jobs from safety and risk services at

UNM to Iowa State University AMES National Labs), used Sharepoint to help connect lab employees in various departments to knowledge in the form of data, and to one another, when their physical work spaces hardly ever overlapped. The recommendations we offered were focused on creating a database of building decontamination procedures and records. Keeping the information current and available on a just-in-time and need-to-know basis was very valuable to the Lab.

It was more fun this time, and we both felt more comfortable designing and making decisions. We developed the Sharepoint site, the procedural documents that supported work on the site and the workflows that helped to organize and maintain the knowledge and assure completeness and correctness of compiled data. We learned a lot from one another. We were coming from different areas of strength.

In Program Evaluation, Dr. Portzline ran her ship in a much more hands-off way than my other OLIT courses. We were responsible for our evaluation project and for our readings, and there was very little else happening in the way of interaction among classmates or student and instructor. The course materials were online, we engaged them weekly, and turned in assignments when due.

It was a great course to take at the end of my program because I had gained such autonomy as an online learner. I am not sure what I would have done if I had tried Program Evaluation first, probably would have made myself a nuisance to a very busy professional. Clearly, also, evaluation came up throughout my OLIT courses, and it was something I was always spotty on, but usually I would have a group-mate who could take the reins on that piece.

I feel that the course was very good, a pointed design

aimed at helping beginners, especially those working for an organization but taking on evaluation for the first time, plan a sound evaluation. For me, the opportunity came just at the perfect time so that I was able to offer my services as an intern to Taos Academy in an evaluative capacity. I was blessed to have a real life application for this course, rather than having had to apply it to some pretend scenario, which would not have been nearly as motivating. Therefore, I got good feedback, was thoroughly engaged, and covered the material quickly in order to meet my internship deadlines, which always seemed to fall just a bit before the course deadlines.

Dr. Portzline was available to me as a mentor and helped me sort out my plan. She gave prompt and valuable expert feedback. I could not have attempted it without her guidance. She was even available to me via email after the course completed as I moved into action on my plan. I did not tap that well often, but it was reassuring to know that I had support in making decisions that would effect an organization. The end result was the start of a real evaluation process with outcomes that did result in adjustment to the organization's function and systems. It was another mind blowing moment... *I did that? Yeah, I did that.*

8. Into the Wild

Reflecting on the depth and breadth of knowledge I have acquired and the connections I have made over three years, I recognize a professional purpose in my life that both stems from and reaches beyond a love and passion for fine arts or an academic interest in language and global cultures. I feel prepared to pursue my personal and professional goals, confident to promote myself and my skills, and motivated to seek involvement in a variety

of interesting projects that advance the greater good of society; whether through developing specific solutions to educational efficiency and effectiveness problems, building, organizing and maintaining knowledge products for improved organizational performance, creating media to support information sharing and knowledge creation, or designing a user experience for software tools, web sites and applications. I am ready to go into the wild, to fend for myself, and, upon *this* graduation, I am feeling much better-prepared to succeed.

In sum, I am very optimistic to continue this professional path. Cheers!

9. In Appreciation

Thank you to all my professors, especially those of you on my committee, who I am lucky to say, have been some of my strongest supporters. You have certainly made possible, by your teaching and expertise, the most significant changes in me. Thank you Dr. Boverie for your reassurance and your direction in the 11th hour of my program, for pushing me to take my “Power Term” and supporting my decision to wait until December to graduate; it was the right decision. I only just now feel that I have had the kind of reflective space to complete this portfolio properly.

Thank you to UNM for offering this online degree, you have forever changed my professional landscape without forcing me to change my physical one, I truly am grateful. I am also thankful to the many colleagues I worked with in group projects. In addition to teaching me exactly what it means to work in a small strong group, they exposed me to many new ideas, new fields of interest, and a variety of professional individuals with whom I am proud to have worked on projects that were done for their own organizations. I hope the work we did together was beneficial to the big picture in your work.