

eLearning Strengths at TAMU

Master of Agriculture Defense

Brandy Tuck

Texas A&M University

### ***Introduction***

My road to Texas A&M University was fairly easy, or at least at the beginning it was. I worked hard in high school, participated in pageants, FFA, and was even a Texas State 4-H Officer. I was destined for Texas A&M University. At age nine when I decided I wanted to attend school here, my grandparents gave me a pewter block ATM key chain. I still carry it to this day. Do you know how hard it is for a nine year old to keep track of anything, let alone something that is supposed to represent their future goal? It is nothing short of a miracle. To me that has always shown my dedication to my goals.

My first summer at Texas A&M University, which was my first semester in college, went great. I earned all A's and I knew I was where I needed to be. Once fall began though, I was just not performing like I should. Things did not feel right and having fun was more important. I could not imagine that a degree in political science was going to make me happy, even though I had convinced myself that was the right major for me. I ended up failing out my sophomore year. I was incredibly disappointed in myself. I did not tell anyone and went to work full time as a nanny for triplets. I worked for the family for four years and after that another full time job. I was not happy. This was not the life I had envisioned for myself. There was no diploma, no Aggie ring, and no pride.

In the spring of 2009 I decided enough was enough. I would undo the damage I had done to my life and my transcript. I met with Dr. Barry Boyd in the agricultural leadership, education and communications (ALEC) department in the College of Agriculture and Life Sciences. I was terrified that he was going to take one look at my previous grades and laugh me right out of Scoates Hall. Incredibly, he did not. He said it was a long shot, but with a lot of hard work, I

might be able to get back in to Texas A&M University. As Kristina Koznick, American World Cup alpine ski racer once said, “ I know it is a long shot, but the fighter in me can’t let go. Hope is a very powerful thing.” (<http://www.quotehd.com>). After a lot of work at Blinn College I was able to enroll in classes at Texas A&M University for the fall 2010 semester. My very first class was ALED 340 (agricultural leadership, education and development) with Dr. Jennifer Strong. She was so excited to have me in her class! She was positive, motivational, and upbeat! I could not get enough of her class. After my first day with her I knew I was exactly where I needed to be. This was home. This department was going to help me become who I was meant to be all along. Another professor I encountered along my journey to my master’s degree was Dr. Robert Strong. He always took a true interest in his students. He actually remembered things about them and later used that information to make his lectures more relatable. Thanks to the support and guidance of these two professors I was set to graduate in May of 2012. Then something strange happened. I was hospitalized due to a blood clot, then a second and a third. The number eventually reached six. As my health continued to decline I did my best to keep up with my classes and my job working for Apple, Inc. until one day in the fall of 2011 I realized I could not remember the last three days. I emailed a professor to explain that I had been ill and would need to take a make-up exam. He responded and said he did not know what I was talking about because my graded test was in his hand. I was hospitalized immediately after that. The verdict? Lupus. Lupus is an autoimmune disease that can affect every part of your body. Your body is basically fighting itself because it views everything as a danger. Lupus affects my blood, lungs, skin, joints and neurological system. Up until this point earning my master’s degree right after I finished my bachelor’s degree was a forgone conclusion. I had Dr. Jen and Dr. Strong’s support. I just needed to take my GRE and move forward, but everything came to a crashing halt after my

diagnoses. I had to take three incompletes that fall. Going into my final semester I had twenty-seven hours to complete. My mom encouraged me to graduate in the summer; my disability advisor encouraged me to graduate in the summer, along with several others. I would have none of it. I walked across the stage at Reed Arena on May 12, 2012. Hope, indeed, is a powerful thing.

I took a year off from my graduate school plans following my graduation. I needed to regroup. With a weakened immune system I could not follow through with my plan of studying international agricultural development. I wanted to travel the world, but realistically that was not going to happen. While I was working on new plan, I began working part time for the Texas A&M Athletic Department as a learning assistant. I worked with the student athletes and assisted them with their academic endeavors. Many of them are ALED/ALEC majors so I was very excited to see material and coursework that I was familiar with. I noticed how easy it was for me to relate my students' interests to their coursework. I was good at teaching them new concepts and re-explaining concepts in a way that was more realistic for them. At that point I realized I could earn my master's degree from the ALEC department and also earn an eLearning certificate that would enable me to teach online. I needed a plan in place to protect myself in the future if my lupus ever got to the point that I could not go to a daily office job. Teaching online was the perfect answer. I would still have interaction with interesting people, be able to teach willing minds and still take care of myself.

With my plan in place and my acceptance letter in hand, I was ready to begin my new journey. I was actually doing it! This was a far cry from the twenty year old that did not know who she was. What I have found amusing during my master's program is that I have switched my degree plan at least twice with class adjustments four times. That is on par with an

undergraduate degree! I finally settled on a non-thesis, distance education Master of Agriculture degree and earning my eLearning certificate along the way.

### ***Program Work***

During my Master of Agriculture program at Texas A&M University, I set five goals for myself. Some were specific for the program, some were specific for my future, and my fifth goal was a personal goal that is as intense and powerful as it is important to me.

My five goals were:

1. To become a better writer—to be bolder, more descriptive.
2. To develop my research skills.
3. To open my mind to the possibilities around me.
4. To further develop my critical thinking skills at a higher level.
5. To do all of this, and graduate on time, despite the obstacles that I face on a daily basis due to my medical condition. (I suffered three seizures and two surgeries during the last two years.)

There are several classes that I completed along the way that really helped me achieve my goals. These classes really enriched my overall experience and will continue to benefit me for years to come. I have already begun to see an immediate use of the information I gained in these classes in my everyday life.

***Fall 2013***

ALEC 695—Frontiers in Research Dr. Robert Strong

ALEC 640- Method of Technological Change Dr. Theresa Murphrey

***Spring 2014***

ALEC 696 –Qualitative Research in AGED Dr. Kim Dooley

***Fall 2014***

EHRD 603—Applied Theoretical Foundation HRD Dr. Larry Dooley

ALEC 610- Principles of Adult Education

ALEC 611—Advanced Methods Distance Education

I took ALEC 695 Frontiers in Research with Dr. Robert Strong in the fall of 2013. This online class was designed to give students an understanding of the social science research process which made it the perfect first semester graduate class. Dr. Strong identified several goals for the class, but there were three that I really focused on; “demonstrate how to evaluate, consume, and communicate social science research findings, describe quantitative research methods and understand the appropriate use of such in studying a research problem, and lastly, demonstrate an understanding of the social science research process by identifying a research problem and develop a research plan for studying the problem” (Strong, 2013).

These three course objectives were directly related to my goals of becoming a better writer, developing my research skills, and developing my critical thinking skills to a higher level. I was able to do this by focusing on three particular projects in the class. These were the literature concept map and references in APA, the content analysis of a quantitative study and the

content analysis of a qualitative study. Each project, I would later learn, really set the stage for the rest of my master's.

The literature concept map project introduced me to setting up the conceptual framework for my papers. It not only refreshed my knowledge on how to completely think through what I would be writing about, but how to justify my research topic, methods and sources. The quantitative content analysis project was slightly terrifying at first. I chose to analyze an article discussing the success of a math-enhanced curriculum being used in an agricultural and technology focused high school. By breaking down each component of the research that was presented, I was able to recognize what I needed to include in my own writing. During this process I was also able to see what was missing in certain research papers and how that affected the author's ability to effectively communicate their findings to their audience.

My writing began to change at this point. I was able to identify when I myself was not communicating in an efficient manner. This also spilled over into my personal and work lives, which helped me become more successful almost immediately. I was amazed at the results. My qualitative content analysis project was much less stressful to complete. I picked up on the demands of the project very quickly and was able to apply the new material that I had learned to this project in an efficient manner. I chose to analyze a paper written about agricultural education student teachers and their time in New South Wales. It was at this point that I decided the qualitative method of research was where I would excel. This ended up changing several times throughout my journey. I finally decided, because I always operate at a high emotional level, that it is actually more difficult for me to design a qualitative research project than a quantitative research project. I was surprised at this discovery. I just assumed that I would do well at explaining emotions, feelings and describing the unique perspective that comes with qualitative

research. It is actually very difficult for me to back up those findings, which is imperative in that specific type of research. Later, when taking classes with Dr. Kim Dooley, I would find ways to work through this. ALEC 695 was a solid introduction to earning a master's degree and thoroughly prepared me for the next year and a half.

My second class in the fall of 2013 was ALEC 640 Methods of Technological Change with Dr. Theresa Murphrey. This online class was designed to place emphasis on the student's role as a professional change agent working with technological change. Dr. Murphrey identified several goals for this class, and as before, I focused on certain ones to help me achieve the goals I had set for myself. The goals I focused on were "to understand the processes by which technological innovations are adopted and diffused among people, understand the dynamics of the change process, and to anticipate and predict the consequences of planned change" (Murphrey).

There was one project in this class that really stood out and I enjoyed completing. It was a presentation called "Expanding Beyond the Classroom". I was to choose a topic from the areas of grand challenges, magazine article reviews, book reviews or individual change agents. After I chose what area I would research and present on, I was to create a power point and write a summary that would be presented via Web Meeting, which is a live online classroom. I chose to present a book review over "The Culture Code" by Clotaire Rapaille. The book focused on breaking into a culture's societal code. As a change agent this is an important skill to have as you can use this to communicate with others in any society and truly reach out to them. In this class I learned that communication is the most important part of being a change agent and this book did an excellent job of explaining why that is so, which is why I chose it for my presentation.



This project captured all aspects of what technological change means in this day and age. I had to work on my own in a virtual setting and then present to an audience that I only knew through online discussion boards. It was a bit daunting, but it also gave me a feeling of true freedom to present my opinions and thoughts without worrying what anyone else thought. I interpreted the material from Dr. Murphrey as I saw fit and used it in a manner that benefited my education. It really helped to personalize the class for me. I felt like I was my own change agent and I used this momentum to continue on into the spring of 2014 when I began taking classes online for my eLearning certificate.

I began the spring of 2014 by taking ALEC 612 Instructional Design for Online Learning with Dr. Theresa Murphrey and ALEC 613 eLearning Development and Delivery Techniques with Dr. Robert Strong. Each class formed a portion of my eLearning certificate education. The final project for Dr. Strong's class was a completed teaching portfolio website showcasing the skills I had learned over the semester. Along the way I completed smaller modules that taught me skills in Adobe Photoshop, Adobe Fireworks, Camtasia Studio/TechSmith SnagIt, and webpage development. This class was the most vital to my eLearning certificate as it taught me the fundamentals of actually presenting the content that I already knew how to develop. There were several photos that I had taken during the fall of 2013 that I used for my Photoshop module. They took on a life of their own after applying the software edits to them. To this day they are still a few of my favorite photos and are framed in my home.

For the final teaching portfolio webpage production project in ALEC 613 I used all of the skills I had acquired over the semester. I used Photoshop edited images for background additions. I showcased my instructional skills by embedding videos I had recorded of myself teaching leadership classes. I used TechSmith and Camtasia to record and edit my videos. These

two programs allowed me to record and edit on my personal computer. I did not need the assistance of an additional person to do this so I was free to produce my instructional videos whenever my schedule allowed. This was very useful as anyone with a busy schedule can attest to.

Concurrently in my ALEC 612 Instructional Design for Online Learning class with Dr. Theresa Murphrey, I was learning how to successfully put together instructional content using storyboards and flowcharts in order to record online lectures. Online lectures are one of the main ways instructors introduce new material to their students. It is also a great way for students to “meet” their instructors. The students get to see a glimpse of their personalities based on the design and format choices the instructors make. This can be background pictures or colors, television or movie clips used to illustrate a point and personal information that the instructor chooses to share such as family photos or stories.

Dr. Murphrey’s class required the submission of one large project, the independent instructional project. The project was then broken down into smaller sub-projects that formed the body of the class. Once everything was completed the main project itself was done. Many of my eLearning certificate classes were broken down this way, which I really appreciated. Looking at a large project such as producing an instructional website or formulating an entire semester of work for a class can be incredibly overwhelming. What these classes showed me, though, was if the preparation is broken down into modules that chronologically make sense, then they are easily manageable. Dr. Murphrey’s classes were exceptional at teaching me this.

My independent instructional project was to provide information about the Agriculture Leadership and Development program at Texas A&M University. I wanted to explain what agricultural leadership is and what it can do for an undergraduate student. This was my

undergraduate degree so it is a subject that is important to me. I feel that it is a great program that opens many doors and possibilities to students that engage with the material and professors. For this project I was to submit a Microsoft Word file, a Microsoft Power Point presentation and three files created using one of the computer programs that I had learned how to use during the class. I chose Camtasia, as it was extremely beneficial to the way I had chosen to present my material.

I was able to use what I was learning in ALEC 613 to help me in ALEC 612 and vice versa. I would find this to be true for the rest of my eLearning certificate program. It was a successful project and I could see the improvements I was making as an instructor. I was beginning to actually live my goal of learning to open my mind to the possibilities around me. I do not believe this will be a goal that I ever completely accomplish and move on from. It will be a goal that I chase for the rest of my life and that is an endeavor that I am proud of.

The third class I took in the spring of 2014 was ALEC 696 Qualitative Research in AGED with Dr. Kim Dooley. This class brought me a long way towards reaching my goals of improving my writing and developing my research skills. This class really taught me a lot. It mostly taught me that I had no idea what I was doing when it came to research. I understood the terminology thanks to my ALEC 695 class, but I had a very difficult time putting those terms into practice. I struggled throughout the entire semester and even had to meet with Dr. Kim Dooley once or twice in person in order to receive assistance. She was incredibly helpful and always had time to work with me. My actual writing skills were never the issue. It was my lack of backing up what I thought and discerned from my research that really held me back. My final project for this class was a twelve-page research manuscript. My topic was online education and its effects on Division I student athletes' learning.

Due to the fact that I worked with student athletes in an educational setting on a daily basis, took online classes myself and was now a full-fledged researcher, I thought this would be the perfect topic for me to research. While all of these things were true, looking back I feel that perhaps I was too close to the topic and was unable to hide my bias. I was also unable to defend my research in an appropriate manner. Dr. Kim Dooley's class is structured in such a way that if your manuscript could not pass approval using the National Agricultural Education Research Conference Evaluation Form for Qualitative Research Manuscripts, then you will not pass her class. She gives her students a second chance to make the needed adjustments, which provides a much needed learning opportunity. I found myself in this situation and at first I was devastated. I had put forth such great effort all semester to make this class work and in the end I was not able to succeed. Then I took a step back and realized it was all a part of the learning process and I needed to get back to work. I made the needed corrections and earned an A in the class.

It felt amazing! I was actually pushing through all of my health issues and succeeding in graduate school! A lot of people in my life were concerned that pursuing my master's would be too stressful for me and that I would put myself in a situation that would make my condition worse. I had already suffered two seizures the previous semester, which was a new symptom of my Lupus, but I kept going. I had something to prove to myself and those around me. I had also recently been initiated into the Texas A&M University chapter of the honor society, Gamma Sigma Delta so my success kept me going.

The next grouping of classes that really stood out in my program were taken in the fall of 2014. They were ALEC 611 Advanced Methods of Distance Education with Dr. Kim Dooley, ALEC 610 Principles of Adult Education with Dr. Darrell Walker, and EHRD 603 Applied Theoretical Foundation of Human Resource Development with Dr. Larry Dooley.

I was particularly excited to take another class with Dr. Kim Dooley because I feel that she always pushes her students to the next level. She teaches her classes the way she instructs her students to teach. Essentially, she leads by example. The final project for ALEC 611 was to create an online class from start to finish. This included creating goals, lesson plans, icebreakers, online interactive class activities, assessments, and visuals.

I decided to teach a class on time management. I had just read a motivational article on time management prior to the beginning of her class and thought it would be a useful topic to develop into a class. I knew a lot about the subject due to my job at the time. I was still working as a learning assistant for the Texas A&M University Athletic Department. A part of my job was to teach Division I student athletes how to manage their time concerning their academic pursuits. Many people scoff at the life a student athlete lives compared to that of a non-student athlete. I do not concern myself with such conversations, but I will say this: there is a need for time management in the lives of all college students regardless of what they are trying to balance. This could be athletics, children, a health condition, campus activities or a job that pays their bills.

I had learned quite a bit about time management and was able to turn that into a functional website that my classmates were able to interact with and learn from. This was the first class that I was really able to get feedback on from my classmates in. It was very useful to see my work through a different pair of eyes. I found it difficult to get feedback along the way from other students that were studying different methods of teaching. They did not quite understand where I was coming from until the final product, the website, was complete. Then they were able to walk through the site, step by step, and experience the class in its entirety. I

have found that the one drawback to teaching online classes is the difficulty in the production process. It is very much a big picture process and that is hard for many people to understand. Learning how to work with that method of understanding really helped me work on all five of my goals that I set for myself while earning my masters.

Goal 1: Become a better writer. By looking at the big picture when setting up an online class, I learned that I needed to be more succinct in my writing. The more specific I was in what I said, the easier it was for others to understand what I meant and to see the big picture along with me.

Goal 2: Develop research skills. I needed to become more efficient at finding pertinent information that would get my point across to my audience. By doing this I would use less time researching and more time using said information to develop rich, informational content for my students. This would enable me to become a more effective educator.

Goal 3: Open my mind to the possibilities around me. I needed to be open to ideas that would benefit others' learning styles and not just my own. This class really helped me to step out of my own comfort zone and utilize other learning styles that I had previously learned about as an undergraduate student. I was able to look at things as an educator and not a student, which I felt was the goal of the entire eLearning certificate. I was also able to see that things that are a great idea in the planning stage, may not work when executed in the final stage. This does not mean that the idea is not useful somewhere else, it just means it does not work for that specific project. I am now able to recognize these situations fairly quickly.

Goal 4: Further develop my critical thinking skills at a higher level. Due to the nature of the final project I completed for ALEC 611, I needed to really understand why I was using certain materials for my class, why I chose certain goals for my students and why I felt it was

important for specific handouts to be used in the class. I could not just use random materials for my class. Each and every item had to have a reason behind it and I needed to have an intellectual decision for that reason. This class really forced me to use critical thinking in a new way.

Goal 5: Graduate on time despite my medical condition. During the fall of 2014 I had a medical situation arise that forced me to go through several medical procedures. While at times it was quite challenging to get my work turned in and completed to the standards that my professors and I had become accustomed, I still did it. Most of the time my professors did not even know that my condition had become that serious. I just kept going and for that I am very proud of myself.

While taking ALEC 611, I also took ALEC 610 Principles of Adult Education with Dr. Darrell Walker. I was disappointed in this class. It was not as disciplined as other classes I had taken. You could talk about any topic, in any format, for whatever length of time you desired. I felt that there was not enough structure. This did help me see the other side of online instruction. As much as I enjoyed talking with Dr. Walker, his class was a study in what not to do as an instructor.

This class helped to reinforce my writing goal of being more descriptive. Readers need to know exactly what you are thinking if you are teaching an online class. When you are in a traditional classroom, students have the opportunity to ask questions immediately. The instructor also has the opportunity to receive feedback and quickly pick up on where their deficiencies lie. Not so in the eLearning world. There are time lags and delays, language barriers, and generation gaps. The student and the educator have to learn to overcome those quickly in order to ensure a successful semester.

While I did enjoy the freedom to decide what I did and did not learn in this class, it felt too much like a Choose Your Own Adventure book for my liking. I learned that I need a little more structure. I like to learn my own lessons in life, not in the classroom.

The third class that really had an impact on me in the fall of 2014 was Dr. Larry Dooley's EHRD 603 Applied Theoretical Foundation of Human Resource Development. I took this class as a part of my master of agriculture curriculum. It was a good way to develop my human resources skills as, at this point, I had decided that I really enjoyed working in college athletics and would be staying in that realm in some capacity. The main body of the class was case studies completed via group work, which I had not come across in an online setting yet. I found it very difficult due to the members of my group. My group immediately lost one member due to class changes and we moved on with three members. We were encouraged by Dr. Larry Dooley to meet in whatever format we felt comfortable with; email, in person or online. Due to one of our group members being a father of two it was easier for us to "meet" via email. This worked fine for all of us, but half way through the semester the father group member changed jobs that required him to commute one hour each way every day. This limited his time for schoolwork as his children were his priority. He was not able to focus as much time on his classwork as one should in a higher education program. Our third group member and I discussed this with him and he was quite open to the conversation. He was very pleasant to work with which made the conversation much more difficult to have. We did not want to be rude, but we were not going to sacrifice our grade for someone else's priorities.

The method we used to complete our case studies was for each member to complete their portion of the module and then submit it to the group for review. We would then discuss them and any corrections the group agreed upon would be made. Our father group member fell short



every time and the third group member and I felt we had to pick up his slack for every project. This got to be very discouraging. We would work with him so he could learn from the projects yet he still made the same mistakes.

Besides the case study group work, there were several individual assignments that were a part of the syllabus. One that really stood out was a creative assignment. We were to use a metaphor to creatively demonstrate or illustrate our understanding of human resource development based on our learning from this course. We were able to demonstrate this in any way we saw fit. This was difficult for me to do as I had been so focused all semester on the traditional methods of working with human resource development (writing papers, studying case studies) that I was not able to truly be creative. I understood what Dr. Larry Dooley was trying to do and I appreciated the breakup of teaching methods, but I was unable to be successful on that assignment. It did prove to me that it is important that all students' needs be met when it comes to instruction especially when it comes to a topic that is so traditional. It must have been incredibly refreshing to those students in the class that struggled with the case studies and needed to be able to express themselves in a different medium.

While I enjoyed the class and was able to take a lot from it, I was glad it was over due to the group project aspect of it. I did not feel I was able to show my true work as the third group member and I had to pull the weight of the father group member. It was the ultimate real world lesson in how it feels to work on a group project in an office setting. I have encountered similar situations in my new full time job and have been able to handle them quite efficiently and effectively because of what I learned in Dr. Larry Dooley's EHRD 603 Applied Theoretical Foundation of Human Resource Development class.

### *Conclusion*

This program allowed me to explore a variety of concepts and ideas that I was interested in without dedicating years of research to them. It was just enough to whet my appetite and further my knowledge on the subjects I was interested in. This degree plan taught me that I can be inspired by anything at any time. I just need to be open to the thought process that will put me in that state of mind. This has helped me in my current full time job as well. I have adapted my way of thinking to always be on the lookout for different ways to accomplish my goals and the issues at hand.

Thanks to the various readings I completed over the course of my master's program, I have become more open minded which is something I never thought possible. I was given the opportunity to participate in a program that allowed me to set my own goals, my own path and explore my own topics of interest while being guided by knowledgeable and respected professionals. This was key in further developing my critical thinking skills. I really enjoyed how my classes complimented each other. They flowed together in a way that allowed me to continuously develop in a very organic way.

I have always been interested in all things leadership education based and by participating in this program I was able to utilize my existing knowledge while learning how to encourage others. At the end of the day I do not want to create followers; I want to create more leaders. I have seen the progress the Agricultural Leadership, Education and Communication department has made over the past five years at Texas A&M University and I am incredibly proud to be a part of that progress.

There have been many versions of myself in my lifetime. Thanks, in part, to this program I have finally been able to put all of them together in a truly authentic collaboration of myself. I am graduating a better, stronger version of myself. Not everyone that began this journey with me is still here for various reasons, but I cherish every memory and lesson that they taught me for at the end I know it was all for a reason.

I will leave here having accomplished my goals, learning more about myself than I thought possible in such a short time, being able to compete with the best and brightest in the country, and having completed one of my ultimate goals—having earned a master's degree from Texas A&M University.

## References

- Ahn, J., Briers, G., Baker, M., Price, E., Strong, R., Piña, M., Zickafoose, A., & Lu, P. (2022). Radio communications on family planning: Case of West Africa. *International Journal of Environmental Research and Public Health*, 19(8), 4577.  
<https://doi.org/10.3390/ijerph19084577>
- Ahn, J., Briers, G., Baker, M., Price, E., Clement, D., Djebou, S., Strong, R., Piña, M., Kibriya, S. (2022). Food security and agricultural challenges in West-African rural communities: a machine learning analysis. *International Journal of Food Properties*, 25(1), 827–844.  
<https://doi.org/10.1080/10942912.2022.2066124>
- Baker, C. N., Strong, R., McCord, C., & Redwine, T. (2022). Evaluating the effects of social capital, self-stigma, and social identity in predicting behavioral intentions of agricultural producers to seek mental health assistance. *International Journal Environmental Research and Public Health*, 19(19), 12110.  
<https://doi.org/10.3390/ijerph191912110>
- Baker, C. N., Strong, R., McCord, C., & Redwine, T. (2022). Seeking support for mental health: Evaluating social identity, social capital, and self-stigma of agricultural producers and their help-seeking preferences. *Advancements in Agricultural Development*, 3(1), 57–69. <https://doi.org/10.37433/aad.v3i1.179>
- Bumguardner, K. M., Strong, R., Murphrey, T. P., & Dooley, L. M. (2014). Examining the blogging habits of agricultural leadership students: Understanding motivation, use, and self-efficacy. *Journal of Agricultural Education*, 55(3), 32–42.  
<https://doi.org/10.5032/jae.2014.03032>

- Coppedge, R. H. & Strong, R. (2013). Vocational programs in the Federal Bureau of Prisons: Examining the potential of agricultural education programs for prisoners. *Journal of Agricultural Education*, 54(3), 116–125.  
<https://doi.org/10.5032/jae.2013.03116>
- Ganpat, W. G., Ramjattan, J., & Strong, R. (2016). Factors influencing self-efficacy and adoption of ICT dissemination tools by new extension officers. *Journal of International Agricultural and Extension Education*, 23(1), 72–85.  
<https://doi.org/10.5191/jiaee.2016.23106>
- Hanagriff, R., & Strong, R. (2013). Using score carding processes to identify barriers for total performance rating (TPR) values in a commodity association. *The Journal of American Business Review, Cambridge*, 2(1), 283–289.
- Harder, A., Ganpat, W., Moore, A., Strong, R., & Lindner, J. R. (2013). An assessment of extension officers' self-perceived programming competencies in selected Caribbean countries. *Journal of International Agricultural and Extension Education*, 20(1), 33–46.  
<https://doi.org/10.5191/jiaee.2013.20103>
- Harder, A., & Strong, R. (2010). An analysis of outcomes associated with conducting county program reviews in Cooperative Extension. *Journal of Southern Agricultural Education Research*, 60, 79–89. <http://www.jsaer.org/pdf/Vol60/2010-60-007.pdf>
- Huynh, P., Murphrey, T. P., Dooley, K. E., Strong, R., & Dooley, L. (2019). An examination of postsecondary agricultural education instructors' perspectives of the case study instructional technique and the development of a model to encourage use. *Journal of Agricultural Education*, 60(3), 173–190. <https://doi.org/10.5032/jae/2019.03173>

- Irby, T. L., & Strong, R. (2015). Instructional competencies needed to develop instructional strategies for mobile learning in fields of agricultural education. *The Quarterly Review of Distance Education*, 16(3), 77–81.
- Irby, T. L., & Strong, R. (2015). A synthesis of mobile learning implications: Forecasting agricultural faculty and student acceptance of mobile learning in academia. *NACTA Journal*, 59(1), 10–17. <https://www.jstor.org/stable/nactajournal.59.1.10>
- Irby, T. L., & Strong, R. (2013). Agricultural education students' acceptance and self-efficacy of mobile technology in classrooms. *NACTA Journal*, 57(1), 82–87. <https://www.jstor.org/stable/nactajournal.57.1.82>
- Irby, T. L., Wynn, J. T., & Strong, R. (2012). A descriptive evaluation of agricultural education eLearning courses: Students' perspectives. *NACTA Journal*, 56(3), 70–76. <https://www.jstor.org/stable/nactajournal.56.3.70>
- Malaidza, H. M., & Strong, R. (2017). Forecasting funds for food security projects: A Reflection on trainings for frontline Extension staff on improved agricultural practices in Malawi. *Journal of International Agricultural and Extension Education*, 21(2), 45–57. <https://doi.org/10.5191/jiaee.2017.24103>
- Mikwamba, K., Dessen, J., Kambewa, D., Messely, L. & Strong, R. (2021). Collaborative governance dynamics in innovation platforms: case of Malawi's District Stakeholder Panel. *Journal of Agricultural Education and Extension*, 27(2), 255–275. <https://doi.org/10.1080/1389224X.2020.1844767>
- Miller, B. J. (2018). *Utilizing the Kirkpatrick model to evaluate a collegiate high-impact leadership development program* (Master's thesis, Texas A&M University, College Station, Texas). <https://hdl.handle.net/1969.1/173373>

Murphrey, T. (2013). *Method of Technological Change* [Syllabus]. College Station, TX: ALEC Department, Texas A&M University.

Palmer, K., Strong, R., Patterson, M., & Elbert, C. (2023). Improving positive food waste behaviors: An egocentric network analysis evaluation of leading women in agriculture's advice networks. *Advancements in Agricultural Development*, 4(2), 48–59.

<https://doi.org/10.37433/aad.v4i2.307>

Palmer, K., & Strong, R. (2022). Evaluating impacts from natural weather-related disasters on farmers mental health worldwide. *Advancements in Agricultural Development*, 3(1), 43–56. <https://doi.org/10.37433/aad.v3i1.175>

Olsovsky, T. B., Strong, R., & Berthold, A. (2021). Enhancing landowner adoption of the Natural Resource Conservation Service's recommended beef cattle grazing management practices. *Advancements in Agricultural Development*, 2(1), 56–69.

<https://doi.org/10.37433/aad.v2i1.89>

QuoteHD.com - Image Quotes for Pinterest and your Facebook Status. (2015). Retrieved from <http://www.quotehd.com>

Ray, N., Strong, R., & Meyers, C. (2022). Measuring the perceived usefulness of social media professional learning networks to elevate agricultural development. *Advancements in Agricultural Development*, 3(4), 43–56. <https://doi.org/10.37433/aad.v3i4.275>

Ray, N. F., & Strong, R. (2016). Move feedback and student learning to the forefront with Doctopus. *The Agricultural Education Magazine*, 88(6), 18–19.

[https://www.naae.org/profdevelopment/magazine/current\\_issue/May\\_Jun\\_2016.pdf](https://www.naae.org/profdevelopment/magazine/current_issue/May_Jun_2016.pdf)

- Seitz, P., Strong, R., Hague, S., & Murphrey, T. P. (2022). Evaluating agricultural extension agent's sustainable cotton land production competencies: Subject matter discrepancies restricting farmers' information adoption. *Land, 11*(11), 2075.  
<https://doi.org/10.3390/land11112075>
- Strong, R., & Lindner, J. R. (2023, April 27). Artificial intelligence systems to share your impact: things that change do not stay the same [Abstract]. *Proceedings of the 2023 Annual Conference of the Association for International Agricultural and Extension Education*. <http://dx.doi.org/10.13140/RG.2.2.18263.96164>
- Strong, R., Wynn II, J. T., Lindner, J. R., & Palmer, K. (2022). Evaluating Brazilian agriculturalists' IoT smart agriculture adoption barriers: Understanding stakeholder salience prior to launching an innovation. *Sensors, 22*(18), 6833.  
<https://doi.org/10.3390/s22186833>
- Strong, R., Zoller, J., & Palmer III, J. M. (2022). Evaluating the adoption of virtual reality equine selection and judging curricula: Instructional responses to a COVID-19 consequence. *Journal of International Agricultural and Extension Education, 29*(1), 76–85.  
<https://doi.org/10.4148/2831-5960.1025>
- Strong, R., Dooley, K., Murphrey, T., Strong, J., Elbert, C., & Baker, M. (2021). The EVAL framework: Developing impact evaluation scholars. *Advancements in Agricultural Development, 2*(3), 1–13. <https://doi.org/10.37433/aad.v2i3.139>



- Strong, R., Edney, K., & Hanagriff, R. (2017). Enhancing food security in the world's youngest nation: A case study of agricultural extension in South Sudan. In P. McNamara & A. Moore (Eds.), *Building Agricultural Extension Capacity in Post Conflict Settings*. (pp. 62–73). CABI International.  
<https://doi.org/10.1079/9781786390592.0062>
- Strong, J., Strong, R., Greenberg, R., Dolly, D., & Perdue, E. (2016). Understanding learners as followers: A study of an American university and a Caribbean university. *International Leadership Journal*, 8(2), 88–103.
- Strong, R. (2013). *Frontiers in Research* [Syllabus]. College Station, TX: ALEC Department, Texas A&M University.
- Strong, R. (2015). Experiential learning. In J. M. Spector (Ed.), *The SAGE Encyclopedia of Educational Technology*. (pp. 284–286). Sage Publications. ISBN: 9781452258225  
<https://doi.org/10.4135/9781483346397>
- Strong, R., Ganpat, W., Harder, A., Irby, T. L., & Lindner, J. R. (2014). Exploring the dissemination of information communication technologies by selected Caribbean extension officers. *Journal of Agricultural Education and Extension*, 20(5), 485–495.  
<https://doi.org/10.1080/1389224x.2014.927373>
- Strong, R., Dooley, L. M., Irby, T. L., & Snyder, L. U. (2014). Mexican banks' acceptance and use of Twitter to assist in evaluating farm loan applications: Exploring the role of agricultural loans on food security. *Journal of International Agricultural and Extension Education*, 21(2), 45–57. <https://doi:10.5191/jiaee.2014.21204>  
<https://app.dimensions.ai/details/publication/pub.1138101574>

- Strong, R., & Williams, J. (2014). Understanding students as followers discovering the influence of followership style on self-directed Learning. *Journal of Agricultural Education*, 55(2), 201–213. <https://doi.org/10.5032/jae.2014.02201>
- Strong, R., Ho, S. P., Odom, S. F., & Irby, T. L. (2013). A course focused on the critical issues in agriculture: Students' acceptance and use of mobile learning. *NACTA Journal*, 57(4), 57–64. <https://www.jstor.org/stable/nactajournal.57.4.57>
- Strong, R., Williams, J., Irby, T. L., & Wynn, J. T. (2013). Country club management and self-directedness: Implications for academics and practitioners of leadership. *NACTA Journal*, 57(4), 38–44. <https://www.jstor.org/stable/nactajournal.57.4.38>
- Strong, R., & Irby, T. L., & Dooley, L. M. (2013). Factors influencing students' behavioral intentions: Examining the potential use of mobile technology in agricultural education courses. *Journal of Agricultural Education*, 54(4), 149–161. <https://doi.org/10.5032/jae.2013.04149>
- Strong, R., Wynn, J. T., Irby, T. L., & Lindner, J. R. (2013). The relationship between students' leadership style and self-directed learning level. *Journal of Agricultural Education*, 54(2), 174–185. <https://doi.org/10.5032/jae.2013.02174>
- Strong, R. (2012). Improving loan distribution to farmers: Informational needs of Mexican banks. *Journal of International Agricultural and Extension Education*, 19(3), 1–13. <https://doi.org/10.5191/jiaee.2012.19306>
- Strong, R. (2012). Reusable learning objects enhanced Master Goat producer's learning. *Journal of Extension*, 50(2). Article 2RIB7. [https://archives.joe.org/joe/2012april/pdf/JOE\\_v50\\_2rb7.pdf](https://archives.joe.org/joe/2012april/pdf/JOE_v50_2rb7.pdf)

- Strong, R., & Harder, A. (2012). Developing an instrument to examine Master Gardeners' participation motives. *Journal of Agricultural Education*, 53(3), 71–83.  
<https://doi.org/10.5032/jae.2012.03071>
- Strong, R., & Harder, A. (2011). Recommended competencies needed for teaching in international extension settings. *Journal of International Agricultural and Extension Education*, 18(3), 71–82. <https://doi.org/10.5191/jiaee.2011.18306>
- Strong, R., & Harder, A. (2011). Interactions among instructional efficacy, motivational orientations, and adult characteristics on Master Gardener tenure. *Journal of Agricultural Education*, 52(4), 65–75. <https://doi.org/10.5032/jae.2011.04065>
- Strong, R., & Harder, A. (2011). The effects of Florida Master Gardener characteristics and motivations on program participation. *Journal of Extension*, 49(5). Article 5FEa10.  
<https://archives.joe.org/joe/2011october/a10.php>
- Strong, R., & Harder, A. (2011). Influence of selected characteristics on Florida Master Gardener's instructional efficacy. *Journal of Agricultural Education*, 52(3), 27–35.  
<https://doi.org/10.5032/jae.2011.03027>
- Strong, R., & Irani, T. (2011). The relationship of future agricultural extension educators' cognitive styles and change strategies for adult learners. *Journal of Extension*, 49(2). Article 2RIB2. <https://archives.joe.org/joe/2011april/rb2.php>
- Strong, R., & Alvis, S. (2011). Utilizing Facebook to disseminate horticultural lessons to adults. *Journal of Southern Agricultural Education Research*, 61, 1–12.  
<http://jsaer.org/pdf/Vol61/2011-61-001.pdf>

- Strong, R. (2011). *Developing and utilizing needs assessments to enhance farmer-driven Extension systems*. Modernizing Extension and Advisory Services (MEAS), funded by USAID. <https://hdl.handle.net/1969.1/192656>
- Strong, R., & Harder, A. (2010). Motivational orientations of adults participating in a Cooperative Extension Master Gardener Program. *Journal of Extension*, 48(4). Article 4RIB2. <https://archives.joe.org/joe/2010august/rb2.php>
- Strong, R., & Harder, A. (2010). Master Gardeners' teaching efficacy and demographics as volunteer educators for Cooperative Extension. *Journal of Southern Agricultural Education Research*, 60, 14–24. <http://www.jsaer.org/pdf/Vol60/2010-60-002.pdf>
- Strong, R., Harder, A., & Carter, H. (2010). Agricultural extension agents' perceptions of effective teaching strategies for adult learners in the Master Beef Producer Program. *Journal of Extension*, 48(3). Article 3RIB2. [https://archives.joe.org/joe/2010june/pdf/JOE\\_v48\\_3rb2.pdf](https://archives.joe.org/joe/2010june/pdf/JOE_v48_3rb2.pdf)
- Strong, R., & Israel, G. D. (2009). The influence of agent/client homophily on adult perceptions about Extension's quality of service. *Journal of Southern Agricultural Education Research*, 59, 70–80. <http://www.jsaer.org/pdf/Vol59/2009-59-006.pdf>
- Strong, R., & Harder, A. (2009). Implications of maintenance and motivation factors on extension agent turnover. *Journal of Extension*, 47(1). Article 1FEA2. <https://archives.joe.org/joe/2009february/a2.php>
- Williams, K., Strong, R., & Lockett, L. (2013). Expanding Cooperative Extension's audience: Establishing a relationship with Cowboy Church members. *Journal of Extension*, 51(6). Article 6RIB7. [https://archives.joe.org/joe/2013december/pdf/JOE\\_v51\\_6rb7.pdf](https://archives.joe.org/joe/2013december/pdf/JOE_v51_6rb7.pdf)

Wynn, J. T., Coppedge, R. H., & Strong, R. (2013). Future IPM trends in Trinidad and Tobago: A qualitative study of farmers' perspectives. *Journal of International Agricultural and Extension Education*, 20(2), 65–76. <https://doi.org/10.5191/jiaee.2013.20205>