# Celebrating Student Achievement

I surveyed a group of teachers who all graduated from the same MED and MET program and analyzed their responses to make conclusions. What did you conclude? I concluded that teachers in both k-2 and 3-5 grade levels are using satisfaction strategies (extra recess, verbal positive reinforcement, sticker) at a high rate.

### What advice can you offer about starting/writing a thesis?

One piece of advice I would give to a student first starting the thesis process would be to read a model thesis from start to finish. This gives you an idea of what the final product of a thesis looks like. When you start the writing process, it is easy to get caught up in each section of the paper. Make sure you keep the bigger picture in mind

#### Jessica Williford

Adaptive Piano Lessons for Children with Autism Using the Lovaas Model of Applied Behavior Analysis and Discrete Trial Teaching



Willyord 2nd from left with Meredith Autism Program employe

#### What led you to pursue this topic?

I have been working with the Meredith Autism Program since my freshman year, and have seen firsthand how successful applied behavior analysis (ABA) is in teaching young children diagnosed as being on the autism spectrum. Because of ABA's success in teaching self-help, pre-academic, language, and social skills, I was interested to see if it could be used to teach a young child with autism to play the piano.

## If you could do your research over again, would you choose the same topic?

Yes! For sure! I learned so much through the experience and I am hopeful that my thesis will serve as an inspiration for others to continue to research the use of ABA in teaching music.

## How did you conduct your re-

I began by doing an extensive literature review on ABA and traditional early childhood music education and piano pedagogy. Using this information, I developed six teaching programs that were modeled after traditional ABA programs and targeted different areas of musical development. I then taught these programs to three preschool-age children with autism over the course of 8 weeks. During this time, I took qualitative and quantitative data to measure the learning gains of the three children.

#### What did you conclude?

My study showed that ABA and DTT can be used in teaching music skills to children with autism. However, further research would be needed in order to understand the full possibilities of using ABA to teach music, and how it compares to a more traditional method. My study also confirmed that teaching piano to a child with autism is highly complex and that there are individual ability and behavioral needs that have to be considered. Each child in my study showed very different learning and behavioral needs and there was never one solution that worked for every child. Usually, many different teaching techniques and strategies had to be tried in order to find one that worked. Although the rate of learning among my participants varied significantly, each child showed individual successes and breakthroughs during the study. Most importantly, each child enjoyed his musical experience and looked forward to his lesson times!

## What advice can you offer about starting/writing your thesis?

Start early! It took me 1 ½ years to complete my thesis, and it was so nice to be able to thoroughly invest in it and not rush through it. Also, don't be shy about talking to a variety of people outside of just your adviser. I was blessed to have a wonderful thesis advisor, but my project benefited so much from the advice and assistance that I received from other professors and staff members at Meredith.

## Is there anything else you would like to add?

Don't be afraid to pursue a topic or idea just because it hasn't been done before!

#### Illa Jones

Surveying the Food Climate of Meredith College: A Qualitative Study



Jones presenting at the event "A Taste of Research.

#### What was your thesis?

I led 6 focus groups only including Meredith College undergraduate students asking them how Meredith College affect their diets. This took place over summer of 2015 and fall semester of 2015. I focused my questions a lot on the transition from high school to college for the participants. This way they could think better about how the college life affected their nutrition as opposed to before college. I depicted the results in a conceptual model that could be used as an education tool for college nutrition educators. I used the results from the focus group to create a survey that was sent to all Meredith college undergrad students. This way I could get a better idea for what all Meredith students think about their nutrition. The survey did ask more quantitative questions to test their nutrition knowledge. This included questions about how many servings of vegetables should be consumed in a day, what are quality sources of protein, and how many calories is ideal for a woman in one day.

#### What led you to pursue this topic?

I am a nutrition major so I wanted to research about nutrition at Meredith College. When I was working on my literature review, I found that a lot of research said that weight gain for most people occurs during young adulthood. I then read about how those who attend college gain more weight than those who do not attend college. However, not much of the research explained why is happened. I want to help fill that knowledge gap by understanding how weight gain could be happening at Meredith. I couldn't find any current research specifically reporting on nutrition status on Meredith's campus, so I started from scratch and just asked students about their own nutrition.

## If you could do your research over again, would you choose the same topic?

YES! I loved this research topic so much. I feel like my results could really help college students to make healthier choices and not develop bad diet habits during college. The results from this project helped me to understand how much food choice plays a part in people's diets. I would like to learn more about this topic if I continue my research in the future.

#### What did you conclude?

I concluded that the transition from high school to college greatly affects Meredith College students' diets. A lot of people seemed to talk about how they completely relied on their parents for their intake and then when they came to college they had no idea how to cook, grocery shop, or choose healthy foods. Most participants from the survey did answer the knowledge questions correctly. This made me think that if students know what healthy food is, they must be struggling with some other aspect of food choice that negatively affects their diets. I concluded that this was because college students are making convenience-type foods a greater priority than healthy foods. College students feel pressed for time, so they just consume the cheapest, fastest food options. Nutrition educators could use this information to help college students find cheaper and faster ways to consume healthy foods.

## What advice can you offer about starting/writing your thesis?

The main piece of advice that I can offer is to pursue a topic that you are passionate about, because this can be a very stressful process, but loving your research can make it feel worth it. I remember many nights having to stay in instead of hanging out with friends or getting off from work at 11pm and then having to go home and

write, but loving my research topic didn't make it so bad. It Being proud of my project motivated me. Also, knowing that by writing about my project meant that other people could learn from me. If I didn't personalize my project and love my topic I don't know how I could have finished my 72 page thesis.

#### **Kaity Melvin**

Life on Mars? The Challenges of Colonizing the Red Planet

#### What was your thesis?

My thesis was more just a general question of what are the challenges of colonizing Mars, specifically the biological challenges, and how could they possibly be handled to ensure that a mission or possible colonization of Mars could go as swiftly as possible, with little to no hitches.

#### What led you to pursue this topic?

I'm mainly working on this project as a way to finish up my last credit of physical science that's required for my B.S in Biology. However, I've always had a deep set love of space, for as long as I can remember. Space is just absolutely fascinating to me, and I will devour any information about space that I can find. When Dr. Schmidt suggested a project about space travel that could combine my major with my love for space, and my knack for writing, I was absolutely sold.

## If you could do your research over again, would you chose the same topic?

If I could do my research over again I absolutely would, simply because I have had so much fun with it in the past few weeks. Which surprised me, as 90% of what I'm doing starts with reading relevant scientific literature, and books written by some fabulous science writers, instead of working in a lab.

## How did you conduct your research?

I conducted my research by reading Packing for Mars by Mary Roach, who is one of my favorite authors of all time, and Mankind Beyond Earth: The History, Science and Future of Human Space Exploration by Claude A. Piantadosi, who actually works over at Duke. These two books provided the basis for my research, and some excellent jumping points so that I could really delve further into. From there I completed writing assignments based on hypothetical what if questions and attempted to find scientific articles that would help me see if there was anything in the literature that helped solve the specific challenges of going into space for so long.

#### What did you conclude?

So far I have realized that space travel is far more dangerous than we really give it credit for, and what is so terrifying is that going into space for long periods of time can actually affect your physical health permanently, which we (Continued on next page)