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## Describe your post-USU graduation, career, or educational goals:

Next year, in the spring of 2013, I will be student teaching locally and interviewing for a full-time teaching position in northern Utah. If the opportunity presents itself, I would prefer to begin my career in a middle school or junior high for several reasons. Research and experience have shown that the early teen years are a critical time in developing students' attitude and aptitude for math and science. I intend to create a classroom atmosphere where all students feel excited about – and successful at – these challenging areas. Hopefully possessing this early confidence will encourage them to pursue further courses and careers in STEM disciplines. Also, it offers me an opportunity to develop sound pedagogical practices with fundamental curriculum, experiences which I could build on if I were to later teach at a high school with older students and more advanced curriculum.

After several years of teaching, I intend to enroll in a secondary education Master's degree program while maintaining a full-time teaching position. This additional training will help me bring current educational research into the classroom in a meaningful way, guiding me to establish effective practices from the very beginning of my career. Of my many research curiosities, I am most interested in developing and implementing more effective assessments (e.g. formative, summative, quantitative, qualitative). Implemented properly, assessments can empower the teacher to probe, more deeply and equitably, the true level of understanding individual students have, which can strengthen the teacher's ability to target instruction and interaction more precisely.

## Describe your motivation and vision for teaching in a STEM discipline:

Science, technology, engineering, and mathematics are all so interconnected – both in this modern world and in my personal journey. I was on an accelerated math track throughout my secondary education, which paved the way for me to successfully complete at least one mathematics or statistics course each semester since being admitted to USU. Since I enjoyed science, both formally in the classroom and informally with my family, I was initially drawn to engineering. After three semesters of engineering, I resolved to make a difference in a classroom with kids instead of in a cubicle with computers. Possessing a broad range of coursework and interests, I couldn't limit myself to just one path. I have pursued two education bachelor's degrees which qualify me to teach essentially any physical science or math class in a secondary school. I am increasingly grateful that I have taken advantage of many teaching opportunities offered me while an undergraduate within the USU College of Science.

Mathematical theories and models drive scientific research. Advancements in science give rise to improved technology and increased engineering capabilities. In turn, the rapid refinement of technology and engineering empowers mathematicians and scientists in their search for a better understanding of how the universe and the life in it operates (on the largest and smallest scales). The exponential advances made in recent centuries will continue, increasing the need for an educated public who are capable of living, working, and contributing in a high-tech world that is fast-changing, complex, and highly-competitive. My wide-ranging exposure will allow me to introduce my students to scientific history, example problems, research methods, and career options in many STEM fields of study.

Finally, I believe much of my developing vision of my future classroom culture includes the following four C's: Courage, Collaboration, Communication, and Creativity. Courage is needed to tackle complex problems and persist in challenging subjects. Collaboration is important for learning and working more effectively. Communication is vital for teachers and students to be understood; literacy (verbal, numerical, scientific, and technological) is a must. Creativity is crucial in problem solving – and it keeps us alive in more ways than one.

I am passionate about teaching young adults science and math so that it becomes a part of them!