Theresa Green and Darcie Christensen, two doctoral students in the Department of Engineering Education, presented research at the 2019 Annual Meeting of the American Education Research Association (AERA) held on April 5-9 in Toronto, Ontario, Canada.

As the world’s largest gathering of education researchers, the AERA Annual Meeting serves as the foremost international showcase of groundbreaking research and innovative practice in education.

Green and Christensen, second year PhD students in USU’s pioneering engineering education program, each co-authored a paper accepted for presentation after undergoing the rigorous AERA peer review process.

Green, a graduate of Valparaiso University in mechanical engineering, is pursuing National Science Foundation (NSF)-funded research aimed at improving K-12 engineering teaching practices using a new approach known as Disciplinary Literacy Instruction (DLI). DLI incorporates disciplinary specific texts and interpretive and evaluative frameworks to apprentice K-12 students in authentic, disciplinary-specific literacy practices.

In her presentation entitled “Examining the Literacy Practices of Electrical Engineers: A Comparative Case Study,” Green presented preliminary findings that will be used to develop a model of disciplinary literacy instruction in K-12 engineering. Green is advised by Dr. Angela Minichiello, Assistant Professor in the Department of Engineering Education.

Christensen, a graduate of Utah State University in biological engineering and recipient of a prestigious NSF Graduate Research Fellowship, is currently pursuing research related to engineering students’ exam experiences.

In her presentation entitled “Exploring Potential Relationships Between Self-Efficacy, Performance, and Electrodermal Arousal in Engineering Exams,” Christensen presented her work aimed at creating engineering assessments that can inform educators and students about real-time knowledge generation and performance. Christensen is advised by Dr. Idalis Villanueva, Assistant Professor in the Department of Engineering Education.