Preparing Skilled Technical Communicators

News Release — Oct. 1, 2019 — The tradition of technical writing is ancient, and the demand for engineers who are skilled technical writers has been constant. Employers consistently identify the ability to communicate in written and verbal form among the top skills required of new engineers. The College of Engineering at USU has taken an aggressive approach to meet this demand.

While it is common for engineering schools to require students take a technical writing course, most courses are offered through departments of English. In 2014, USU's College of Engineering began to require an in-house, customized technical writing course of its undergraduate students. The goal of this course is to prepare students with the individual and collaborative technical writing, presentation and verbal skills needed for success in their careers. Assignments include proposals, technical reports, abstracts, business correspondence and technical presentations that are audience centered, articulate and grammatically correct.

"Initially, student reactions to having to take a technical communications class centered on 'Engineers don’t need to know how to write,' or 'Why are you making us take this class?'" said Melissa Scheaffer, a faculty member in the Department of Engineering Education who created the Engineering Writing Center. "Today, with over 400 students enrolled annually, this sentiment is markedly different as students realize the importance of communication skills in landing their first job."

The Engineering Writing Center was established in January 2017. It is one of a handful of dedicated engineering writing centers across the nation providing engineering students access to quality writing assistance through one-on-one tutoring sessions. Staffed with highly trained student writing consultants majoring in engineering or technical writing, this peer interaction allows for feedback, personalized instruction and assurance.

Scheaffer says the stigma that engineers are poor writers can impact students' confidence in their writing abilities. Brianne Sorensen, a senior majoring in technical writing, says the most rewarding part of working as a writing consultant is seeing the progress students make. "The first few weeks they come in with documents riddled with mistakes," she said. "By the end of the semester they have significantly fewer errors and feel more confident about their writing." Amy Carmellini, a senior in environmental engineering, echoed this comment. "The writing consultant was very good at taking my worries into account and tailoring the visit to addressing those concerns," she said.

Use of the center has grown significantly. Last year, over 1,500 engineering students visited the center for assistance, an increase of 54 percent from the previous year.

Faculty are also realizing the importance of reinforcing writing as part of their engineering curricula. Says "Students have a strong tendency to underestimate the importance of communicating technical information," said faculty Spencer Wendell. "In the instrumentation and measurements course I teach, I require students visit the Engineering Writing Center for at least three of their lab reports. Over the past few years, I have seen marked improvements in student technical communication."

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