


Message from the Chair



Online? Are you kidding me?

Ted Branoff, Ph.D.

North Carolina State University

I fell in love with engineering graphics in 1975 when I was exposed to it as part of an industrial arts course in junior high. I took four years of drafting in high school, and then went to North Carolina State University to study mechanical engineering. I can vividly remember sitting in my dorm room doing dynamics homework during my junior year thinking, “I don’t want to do this anymore!” I was not doing graphics, and I could not see myself doing calculus the rest of my life.

After a little bit of research, I found a program in the College of Education that prepared individuals to teach at the post-secondary level. At that time I could not see myself teaching. I had worked part time at Measurements Group for a year and Siemens-Switchgear Division for three years doing specifications drafting. I really wanted to graduate and begin working fulltime. But something happened during the fall of 1985 that changed my plans – I completed my student teaching assignment. I taught two sections of Engineering Graphics I at NC State and discovered the joys of being in the classroom. The next fall I was hired to teach five sections of the introductory engineering graphics course, and I have been there since.

Although I have not seen as many changes as some of you old-timers, I did start out on the drafting board. My first job was creating PC board layouts – ink on mylar and lettering with a Leroy lettering set. Over the last 30 years, engineering graphics’ standards have not changed much. The tools that we use have changed drastically. We have all had to adapt to changes in CAD software – 2D, 3D wireframe, solid modeling, and now constraint-based CAD and PDM systems. The

Internet has also influenced not only what we plan to do but what our students expect us to do. In a rush to make administrators and students happy, many of us have or are planning to create online graphics courses. Will this work? Will the courses be just as good as face-to-face courses? How will we evaluate sketching exercises and other student work? Do we even need to worry about sketching? I don’t know the answers to these questions, but I have some thoughts.

I believe my best teaching occurs when I have about 10 students in a face-to-face course. This allows me to really get to know what each student can do, and I have plenty of time to give each one meaningful feedback on their work. Fantasy over! Not many administrators are going to let us get away with teaching only 10 students. Students are also expecting something different. Some want to be able to review a lecture in a podcast format while working out at the gym.

There are now many online tools available that allow us to supplement what we do in the classroom. These include both synchronous and asynchronous tools such as streaming media, discussion boards, online quizzing, whiteboards, audio/video, and chatrooms. They all seem great, but are they better for our students? I am sure we all have our opinions. I know we have had heated discussions here at NC State about these technologies. If you are also experiencing these issues, I would like to encourage you to conduct research that will address these questions. Instead of blindly jumping into some of these technologies, let’s design some good studies that will provide meaningful information to the division concerning online instruction.