

Message from the Chair

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During the 1970's, the early years of digital computing, it was believed that the increasing emphasis on mathematical and computational analyses would bring an end to graphical analysis. As it turned out, nothing could have been further from reality. Graphical analysis did not disappear; it merely took a different form that then became one of the most rapidly advancing areas of technology. Computers and software have revolutionized graphics, and have further ingrained graphics as a necessary part of the design process. Over the past three decades, typical graphical analysis skills have evolved from graphical mathematics with manual drafting instruments to 3-dimensional modeling on computers. The major intellectual challenges for students are no longer the principles of descriptive geometry but rather the incorporation of design intent into parametric and feature-based models. Graphical communications may now include creating virtual walk-throughs of a new building or a factory floor, as well as creating working drawings. But while modern graphics offers exciting opportunities, it also presents unique challenges. Although it is exciting to see classes that fully exploit the strengths of solid modeling, it is also frustrating to see other courses still teaching obsolete skills. Instrument drawing, descriptive geometry, and graphical mathematics have historical interest, but have very limited use in today's engineering skill set.

Graphics continues to evolve, and EDGD must keep pace with this evolution. At this time, however, there are signs that graphics tools and practices may be evolving faster than we are. If we are to remain the leaders in engineering graphics education, we must pursue the following paths:

1. We must be willing to explore new applications and methods. We must be willing to embrace change, rather than resist it.
2. We must engage our industry partners, who have driven many of the developments in graphics for design visualization and analysis.
3. We must broaden the scope of our Division to encompass greater aspects of visualization and visual communication in engineering.
4. We must reinforce the development of graphical communication skills as a necessary part of engineering education, and expand academic research in this area.
5. We must recruit, develop, encourage, and support younger members.

My overall message is simple: we must continue to adapt and evolve, or risk becoming obsolete and irrelevant. We must keep ourselves updated. We must stay aware of the latest developments and be willing to go in new directions. We owe this to ourselves, to our profession, and to our students.

A handwritten signature in black ink, appearing to read "D.K. Lieu". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.

Dennis K. Lieu