



65th Midyear Message

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We just finished our 65th midyear meeting in Houghton Michigan hosted by Michigan Tech. Special thanks go to our general chair Sheryl Sorby, and our co-chairs Amy Hamlin and Norma Veurink for being such welcoming hosts. As suggested on one of the postcards in our meeting packet, Houghton is not the End of Earth but simply two miles from it. For many of us Houghton may be the closest we will ever get to the Arctic Circle. Despite our apprehensions, Houghton turned out to be a beautiful setting for a midyear meeting and the Michigan Tech "girls" did a fantastic job.

The pre-conference activities were well planned and lots of fun. These included a tour of the Quincy mine which was the deepest mine in 1945. We descended into a mine which reached a record depth of 9260 feet in 1945. Later that evening we dined at the exclusive Miscowaubik Club restaurant. It was built as a social club by the copper barons in 1903. Sheryl Sorby later hosted us for dessert at her palatial estate. Sunday brought the Copper County tour of the Keweena Peninsula. The scenic countryside made one appreciate the beauty of Houghton's surroundings.

Reflecting on the proceedings one can find a firm foundation in past research, present status, and the future direction of our most important task of improving students' spatial visualization abilities. Papers illustrated methods for improving spatial abilities using intervention courses designed for poor spatial test performers. Others presented new directions using grants to help train high school math teachers increase their student's knowledge of geometry and spatial

abilities through the use of 3-D solid modeling software. Other research addressed balancing face-to-face versus on-line graphic instruction which is an efficacy question of the future. And whenever there is a paradigm shift in how we teach graphics, there's a conflict. One paradigm shift examined the struggle with switching from curriculum based technical drawing to design and communication graphics when training teachers. Two papers addressed the problem of introducing design problems into the curriculum. The first addressed the problems encountered by presenting freshman with a hands-on design problem and then waiting until a student's senior capstone course to present another practical real world design problem. The second discussed the difficulty of finding design problems at the first year level of engineering knowledge as well as being challenging, realistic, and interesting to students of different engineering majors. As always there were papers that introduced new technologies in our field. A promising technology described the use of 3-D laser scanners that generate a "point cluster" upon which a surface model is based. This surface model can be translated into a STL file or be used to generate a solid model. This is a powerful tool for reverse engineering a part. But the most exciting development of this midyear meeting is the number of papers presented by members from outside the division. These individuals were invited to present papers they presented at the annual ASEE conference and five accepted. These five papers represented 28% of the papers presented at this year's midyear meeting. All five papers were from the Design Engineering Education Division. Our division needs new blood in order to continue our mission of fostering the power of graphics

Message from the Chair

in engineering and technology students. As our division continues to gray, we all need to think of new ways to grow our membership. Inviting nondivision members to present papers is an ingenious method. We would not be in this division if we were not creative thinkers so bring forward any new ideas to grow our membership even if it may seem difficult to implement.

We all enjoy participating in the midyear because of its intimate size. It is a time to foster personal relationships, grow professionally, and remember, as individuals we look a lot less nerdy when we are together as a group.