SEMINAR ANNOUNCEMENT

Incorporating Educational Theory and Technological Advances to Support University Teaching in Geosciences

The COMET Program has been providing educational resources to the geoscience community for nearly 30 years. A key strength of the program is the work of COMET instructional designers to craft training that meets the needs of the operational community to improve job performance. An additional application of these efforts is using the conceptual model animations and explanations in the classroom. The operational focus of COMET materials provides effective real-world examples that apply the scientific information being presented in universities. More recently, the program has expanded delivery of training to include educational videos through the COMET YouTube channel.

New efforts to support the university community include the development of a synoptic lab package, instrumentation course support with instructions to create 3D printed weather stations, and the use of animations on virtual reality platforms. Through VR and AR application, learners can explore the details of conceptual models by interrogating the graphic in much greater detail. Another type of interactive exercise being incorporated is branched simulations. Through a series of questions posed by a stakeholder of weather forecasts, learners explore how their answers can impact the decisions of the stakeholder. This type of exercise has become popular in lessons related to impact based forecasting. To help learners retain the knowledge and skills introduced through the lesson, booster questions have been added to modules.

In the past two years, COMET has participated in international workshops to discuss how academic institutions can support national meteorological services by infusing operational applications of meteorology to better prepare graduates of their programs to work as weather forecasters. In support of research, the COMET Outreach program provides small grants for applied research between universities and operational forecasting partners.

COMET is part of the UCAR Community Programs (UCP), and this presentation is part of a UCP effort to connect with the universities to better understand how we can support their education and research efforts.

Dr. Elizabeth Page
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Monday, February 4, 2019, at 3:15pm
295 FASB
Refreshments and Meet the Speaker at 3:00pm

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