**Keynote address:**

Grand Challenges in Science Education - John Bedward (Buena Vista University; Storm Lake, IA)

The convergence of the Next Generation Science Standards (NGSS), active learning, the Internet, big data and mobile devices provide us with an opportunity to rethink the K-16 learning experience. This talk will center on mobile sensors, global science and engineering collaborative platforms and citizen science as vehicles to foster authentic learning. Bring your smart device and get ready to play.

Brief bio outline...

Degree

* Graduate of North Carolina State University, Raleigh, North Carolina, Science Education, Ph.D., 2012

Current Appointment

* Department Chair, Mathematics, Science and STEM
* Director of Privately Funded STEM Endowment

Active Research

* Geoscience Undergraduate Education (NSF Funded)
* S-STEM ACCESS Grant (NSF Funded)
* Teacher Prep Programs
* Science and Engineering Modeling
* Emerging technology integration

Active Engagement

* Statewide Science Team
* Chair, NW Iowa Governor's STEM Council

Some of the professional organizations...

* AERA, NARST, ASTE, ASEE, NCTM, NSTA