

## **Meritorious Inductee into the Class of 2014**

### **Dr. Len Annetta**

Before joining the faculty at George Mason University and as an associate professor of Science Education in the Department of Mathematics, Science and Technology Education at North Carolina State University, Dr. Len Annetta's research has focused on distance learning and the effect of instructional technology on science learning of teachers and students in rural and underserved populations. His research has cascaded from his dissertation on comparing three different distance delivery strategies on science teacher professional development to the current focus on evaluating video games as a teaching and learning tool and as a vehicle for synchronous online instruction. Understanding the popularity of online, multiuser video game play, Dr. Annetta began to use his past programming knowledge to build a virtual environment that became the platform for his current research. Through two separate internally funded grants, he designed and created a synchronous, online 3D virtual environment for distance learning courses offered at North Carolina State.

In addition, with a \$1.2 million grant from the National Science Foundation, he and his team have created another seminal project in virtual learning called HI FIVES (Highly Interactive Fun Virtual Environments in Science). This initiative explores the viability of using video games as a supplement to science instruction in grades 5-9 and seeks to teach both teachers and students to design and build multiplayer games that comply with state and national science and mathematics standards.

This project was a springboard to another \$4 million in grant projects including GRADUATE (students creating games as part of the North Carolina graduation requirement) and STIMULATE (games to train teachers). "Ultimately, it is our hope through this work that students will gain a greater appreciation for science, pursue higher levels of science coursework and eventually seek careers in science, technology, engineering and mathematics," says Len. "For teachers, the tools and training we are developing will provide a way to take ownership in curriculum design and find a fun, innovative approach to integrating current technology in their classroom."

Len and his team are working with colleagues at Harvard University and the University of California at Los Angeles and other major universities to create educationally focused games which will significantly enhance classroom learning in science and other areas for students.

A 1989 graduate of Lake-Lehman High School, Len has long had a keen interest in both science and education. He earned his Bachelor's of Science degree in Physical Science from Salisbury University as well as his Master's degree in Teaching. He then went to the University of Missouri for his Ph.D in Science Education.

In 2008, Len was honored with three awards for his extension work teaching K-12 teachers and students video game design for science and mathematics learning.

The awards were progressive from: The College of Education Outstanding Extension Service Award, to the induction into the North Carolina State University Academy of Outstanding Faculty Engaged in Extension Award to the Distinguished Alumni Engaged in Extension and Outreach award.

In 2006 and 2010 Len was honored along with his colleagues as co-writers, with the National Technology Leadership Initiative Award.

With over 4500 entries in 2011, 2012, and 2014, Len was also honored as a Nifty Fifty speaker for the United States Science and Engineering Festival.

Len was three times listed in the top 50 people in Science Education by the USA Science Engineering Festival, has authored three books, 12 book chapters, 60 journal articles and numerous conference proceedings.

Len is currently a Professor of Science Education at George Mason University, Washington D.C as resides with his wife and children in Virginia.

