

The Idaho National Engineering and Environmental Laboratory and the Museum of Idaho in Idaho Falls, Idaho, USA, have teamed up for the third year to bring new developments in science and state-of-the-art technology into the community. Middle school-aged students, their teachers and parents, and the community are exposed to resources that can help counsel pre-college children to make informed decisions about possible careers in science, mathematics, engineering, and technology.

The Science and Engineering Expo is a carnival of hands-on activities, interactive exhibits and demonstrations, and crowd-pleasing presentations. This is a high-impact way to augment the teaching of a traditional science and technology curriculum in K-12 schools. Universities, professional societies, and businesses that represent local, regional, and national interests sponsor the learning stations. These organizations come together to demonstrate scholarship and technical expertise. Their experts staff the stations in various scientific disciplines, energy, mathematics, engineering, air and space, robotics, computer and medical technology, and more. An interdisciplinary team of judges evaluates the stations on visual and presentational impact, technical merit, and education value.

The Science and Engineering Expo is held annually in Idaho Falls during the first week in October. It spans two student days to allow for school bussing and a family day. The Expo is free and open to the public. It is staffed by more than 100 volunteers from different civic groups to perform varied tasks, oversee safety, and provide security.

In 2003, more than 7,500 people, including 5,000 K-12 students, attended the Expo. The model was spun-off to the College of Southern Idaho where another 1,500 students attended. My presentation will report highlights of the 2004 Expo, share the model for replication, and explain how the Expo advances student learning in science and engineering.

The Idaho National Engineering and Environmental Laboratory has been home to one of the largest concentrations of technical professionals in the northern Rocky Mountain region in the United States for more than 50 years. Operated for the U. S. Department of Energy, it is the scene of some of the most advanced research programs in the world. By linking the scientists and engineers, academia, and other professionals, the Science and Engineering Expo helps to foster science and engineering literacy and develop a world-class future workforce.