Third Annual "Getting Wireless" student design challenge

During the spring, 2012 semester, industrial design students at Georgia Institute of Technology (Georgia Tech) and Virginia Polytechnic Institute and State University (Virginia Tech) participated in the Wireless RERC's third annual "Getting Wireless" design challenge.

At the beginning of the 2-week exercise, students were presented with the following scenario:

"You're a junior designer(s) for a wireless manufacturer. At this year's Consumer Electronics Show, some of your company's marketing staff met consumer researchers from the Wireless RERC. RERC staff shared their research findings showing the large number of people with disabilities among current wireless customers. These findings also showed the large potential market of people with disabilities who aren't yet wireless customers. The marketing staff has prepared several profiles ("personas") of these customers and has asked your manager to review products from the company's line and determine what features would have to be added or changed in order to attract these personas as new customers - and to keep those with disabilities who are already among the company's customers."

Students Georgia Tech and Va Tech students and staff at the final presentation on April 20, 2012

This year, 40 second-year students at Virginia Tech and 24 third-year students at Georgia Tech participated. Teams of 3-4 students were assigned one of four customer personas based on data collected through the Wireless RERC's Survey of User Needs (SUN):
   "Elizabeth and Stan", cellphone users in their 80's
   "Jack", a 68-year old rural resident with cardio-pulmonary disabilities and limited literacy
   "Michael", a 15 year old student with hearing and mental limitations
   "Zach", a 24 year old army veteran starting a new job with limited balance and no use of his right arm.

Each team developed design strategies to meet the needs of their persona, while also considering the impact of these strategies on the other two personas and on wireless customers without disabilities.
 "Evaluating the Universal Design Performance of Products", a tool developed by the Center for Universal Design at North Carolina State University, was used in assessing students' universal design approaches. Students were encouraged to refer to this guide throughout their design process.
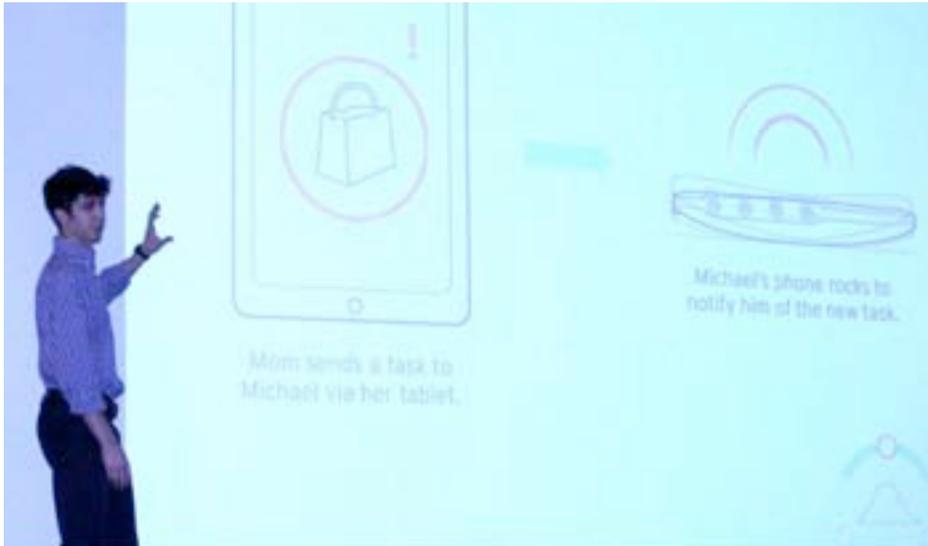
At the conclusion of the exercise, each student team presented their 3D study model, along with a poster describing their research and the features of their design. Students' presentations described design strategies to meet the needs of their persona, while also considering the impact of these strategies on the other two personas and on wireless customers without disabilities. On hand to review the presentations were Wireless RERC staff Brian Jones and Jim Mueller.
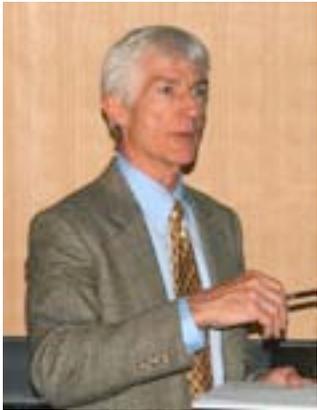
Students participating in the "Getting Wireless" design challenges have found the experience rewarding on many levels. Most found their basic approach to design fundamentally changed. All agreed that considering elders and people with disabilities improves the usability of design for everyone.

Despite the limited duration of the "Getting Wireless" challenges, students at both Georgia Tech and Virginia Tech impressed the Wireless RERC staff with insightful research, a broad range of creative concepts, and polished final presentations. Tomorrow's wireless customers with and without disabilities would be wise to hope that these students will consider careers in the wireless industry.