## **Gearing Up for Teachers**

onestly — how much can be accomplished in three or four days? Now I know! If all of my summer workshops were conducted and presented as this 'TI' adventure has been, teachers, administration and education would change and advance as not seen previously. I will use repeatedly in my teaching the wonders I have added to my inventory of options. Thank you ARRL." This is just one comment from the 2007 Teachers Institute (TI).

The Teachers Institute on Wireless Technology continues to evolve and expand. This summer, six TI sessions are planned allowing in-service training opportunities for 72 teachers. Two additional instructors will be added to the faculty in anticipation of future program expansions.

The TI has become an integral part of the portfolio of resources that the Education & Technology Program makes available to teachers and schools. This four day intensive, in-residence learning opportunity is designed for motivated teachers and other school staff who want to learn more about wireless technology. A typical agenda for the training includes learning basic electronics, and how to teach it through the art and science of radio. Included in the training

No teacher left uninspired.

Mark Spencer, WA8SME

are on-the-air activities such as radio direction finding, satellite contacts bringing space technology directly into the classroom though radio, an introduction to microcontroller programming using a robotic construction project and just enjoying ham radio operation.

The participating teachers can use the TI to fulfill the continuing professional education requirements needed to maintain their teaching credentials. Upon successful completion, they receive three hours of graduate level college credit. The goal of the TI is to provide teachers with the skills and resources they need to learn more about wireless technology. Once these concepts are understood, they can bring them to their students, in their classrooms.

Every participant comes away from the TI experience with something they can apply in their classrooms. As one wrote: "I have always considered myself to be an innovative instructor; however, after this workshop I realize I could have done a much better job teaching science and math. Thank you so much for this wonderful opportunity."

The TI curriculum continues to be refined. New in this year's TI is a 24 hour clock project to teach basic soldering skills, how to build and use a radio telescope for demonstrating the fundamentals of radio astronomy and a "Mars Lander" simulation that ties all the content presented during the TI together into one student-centered application of the science of radio.

If you are a teacher, or you know a teacher who could benefit from the experience, you'll want to check into the Teachers Institute. The dates, locations and an application for 2008 TI sessions will be posted to www.arrl.org/FandES/tbp/ti.html as soon as the details are finalized. If you want additional information, contact Mark Spencer, WA8SME, the Education & Technology Program Coordinator (and TI instructor) at 530-495-9150 (Pacific Time) or at mspencer@arrl.org.

Spaces in each TI class are limited to 12 and they fill up fast, so don't delay in submitting your application. Be one of those who leave the TI experience with some great ideas and a changed outlook:

"Great workshop. Too many times, technology is considered computers only. This workshop expanded my technological horizon. I was amazed how many national science standards could be addressed through the use of wireless technology."



The TI is really controlled chaos with four days of hands-on activity while teachers