Design and Implementation of Two Two-Week Teacher Enhancement Institutes

Lynn Lambert Christopher Newport University

During this summer, I have been part of a four team effort that planned and executed two two-week Teacher Enhancement Institutes (TEI) for 40 K-8 teachers from this area. The TEI was designed to enhance teachers' background in aeronautics and technology so that they would be better equipped to encourage and to train students in the mathematics, science, and technology fields. The teachers were given a stipend and three graduate credits from Christopher Newport University for their participation in this program.

The four ASEE fellows worked together to develop objectives and a schedule of activities for each two-week session based on the program outline given in the grants that were funding this effort. We divided the responsibilities in coordinating and implementing each part of the TEI based on the specific strengths and background of each ASEE fellow. My specific responsibilities were: 1) to develop the course syllabus and generally handle all matters involved with the graduate course; 2) coordinate the follow-up sessions; and 3) design and manage half of the technology sessions that we had scheduled (approximately 30% of the TEI was devoted to technology). Because the first two responsibilities were primarily administrative in nature, I will address only the last.

The technology sessions were divided into computer-only and other technologies (e.g., television and digital technology including scanning, digital photography and CD-ROM). I had responsibility for the computer-only technology sessions. The emphasis of these sessions was on use of the Internet specifically to locate and use educational resources. To maximize learning, these sessions were hands-on with two teachers at each computer. Each teacher received instruction in, and actually used, the most popular tools available on the Internet: email (they were given temporary accounts at NASA LaRC), anonymous ftp and archie, gopher and veronica, mosaic, and telnet. Teachers participated in hands-on workshops to learn about these programs, but were also given time during the two-week session to explore on their own and to find resources on the Net that specifically met their needs. In order to ensure that Internet access continues after their return to the classroom, all teachers who did not have them also applied for Learning Link accounts (from WHRO, the local public television station) and Virginia Pen accounts (from the Department of Education of Virginia), both of which allow textbased access to Internet. In addition to getting exposure to and practice with Internet tools, teachers were also given a hands-on seminar (and also given practice time) on ClarisWorks, an integrated word processing, spreadsheet, database, and paint package. The technology sessions (and TEI as a whole) were enthusiastically received by both new and more experienced teachers as extremely helpful in improving their ability to use technology in developing lesson plans.