FINAL REPORT

SUSTAINABLE UNIVERSITIES INITIATIVE

“Environmental Impact Brochure/Pamphlet”

May 2, 2002 to January 31, 2003

Tri-County Technical College
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Overview. On May 2, 2002, Tri-County Technical College was awarded an SUI grant to develop course materials to incorporate environmental issues into its MAT 104, Mathematics Foundations course. This course is a part of the Technology Gateway curriculum of the South Carolina Advanced Technological Education (ATE) program. Dr. Jerry Marshall was the Primary Facilitator for the project. The grant funds enabled Dr. Marshall, together with his colleague, Mathematics Instructor Joe Stearns, to develop an environmental impact component for the MAT 104 course. This enhancement helps students and faculty to become aware of environmental issues. In addition, it provides students and faculty with the knowledge they need to make informed decisions regarding technology careers and how their choices can impact our environment in a positive or negative way.

During the summer of 2002, Dr. Marshall and his colleague, Joe Stearns searched the Internet to identify the most current resources on environmental mathematics and careers in technology. Using SUI grant funds, they purchased sixteen (16) books and five (5) videotapes and asked the College's librarian to add them to Tri-County Technical College's library collection. Also, they developed a student handout (see attached) to serve as a resource for including an additional optional component to the Introduction to Technology Careers project in the MAT 104 course. In this project students produce a brochure/pamphlet that contrasts careers as engineers, technologists, and technicians. Dr. Marshall also developed and posted a web page to the Internet, which contains an annotated bibliography of resources related to technology careers, environmental issues, and environmental mathematics. It provides hyperlinks to thirteen (13) select sites (see http://www.sctechsystem.com/TCTC/math/MAT%20104%20Environmental%20Issues%20Homepage.htm).

Grant Information Dissemination. On May 16, 2002, the College's Grants Office disseminated a Grants Flash for this SUI grant. It can be viewed on the Internet at: http://www.sctechsystem.com/TCTC/grants/grf20.html. In July, the Tri-County Technical College Intercom, the College's internal newsletter, included an article regarding this grant entitled “SUI Grant Helps Students to Become Environmentally Aware.” That same month, the Greenville News, a local newspaper, printed an article by Anna Simon, a staff writer at the Greenville News. It was called “Tri-County Tech given grant for green curriculum.” This article was also posted at http://greenvilleonline.cmo/news/2002/07/07/2002070725554.htm.

On November 12, 2002, Ms. Patricia L. Jerman was provided an interim report on the College's SUI activities by e-mail. Also, during November, Dr. Elaine L. Craft, Director of the SC ATE Center of Excellence/National Resource Center for Engineering
Technology Education, was provided with the student handout in PDF format and information concerning our MAT 104 web page. She was pleased with these innovations and agreed to forward this information to the SC ATE listserv so that it might “reach everyone who teaches in the Technology Gateway and others who may be stimulated by your work to do something similar in other courses.” This listserv contains individuals that work at each of the sixteen (16) technical colleges in South Carolina.

By coordinating with Dr. Patricia C. Kenschaft, Chair of the Committee on Mathematics and the Environment of the Mathematical Association of America (MAA), and with Dr. Karen D. Bolinger, Organizer of the MAA Session on Environmental Mathematics in the Classroom, Dr. Marshall was granted permission to share information concerning this SUI project at the Joint Mathematics Meetings, which were held in Baltimore, Maryland in January, 2003. He distributed a green handout (copy attached) to interested parties during this national convention.

**First Use of SUI Grant Materials.** During the fall 2002 semester, Dr. Marshall taught one MAT 104 class consisting of twelve (12) students. Using WebCT enhancements, he provided his students with easy access to the MAT 104 web page. When it came time for the Introduction to Technology Careers project, Dr. Marshall provided his students with the handout that Math Instructor Stearns and he had developed. He informed his students of the materials that had been added to the library collection with SUI grant funds. He repeatedly encouraged his students to include an environmental impact component in the brochure/pamphlets they were producing using Microsoft Publisher. Four (4) of these twelve students chose to include this additional optional component. They chose artwork like a koala bear in a eucalyptus tree and provided statements like “despite what some people might think, our nation’s nuclear plants are very environment friendly.” This was only a small step; but it was a big increase on giving no regard to environmental issues while preparing for a career in technology.