AMSER Project Summary

The Applied Math and Science Education Repository (AMSER) is a collaborative NSDL Pathways project designed to help meet the needs of community and technical colleges and forge a link between these communities and the NSDL. AMSER will consist of an applied mathematics and science educational resource collection, a customized portal to aid community college students and educators in locating and accessing those resources, and a variety of integrated services designed specifically to enhance the learning experiences of community college students and the teaching capabilities of instructors at those institutions. Services designed and carried out by AMSER will include a mixture of technology based services and hands-on training. Examples of technology based services include personalized bulletins covering new resources of interest and a personalized interface that will help a student or teacher gather a set of resources to serve their immediate needs. Hands-on learning experiences will include faculty development training sessions designed to help educators learn how to utilize AMSER in the classroom as well as shorter presentations at conferences to help expose participants to AMSER and the NSDL.

The development of the AMSER portal, resource collection, and accompanying services will all be informed by the target community itself with focus groups, an advisory board, and a user advisory group all working to help AMSER ultimately deliver services and resources that are truly useful to technical and community colleges. Project partners include the Internet Scout Project, MERLOT, the American Association of Community Colleges, the City College of San Francisco, the Advanced Technological Education projects, the Tennessee Board of Regents, the Virginia Community College System, and others.

Intellectual Merit
The AMSER project has strong intellectual merit based on the contributions it will make to the community and technical college arena and to NSDL as a whole. This project proposes innovative ways to reach students and faculty at community and technical colleges and connect them with the NSDL and the applied math and science resources available through AMSER. The Digital Library field is still in its infancy, and the work proposed here will advance the knowledge base in reaching and engaging an underserved portion of the educational community – especially the work done on user interface testing with community college students and faculty and the online and field evaluation work proposed for the whole project.

Broader Impacts
Community colleges educate a large percentage of our nation's workforce, and AMSER will impact students at community and technical colleges, and so impact many of tomorrow's workers. A better and deeper understanding of STEM online resources may also mean a more discerning use of the web generally – students who use AMSER and NSDL will learn not only about (and from) STEM resources in their fields, but will expand their skill set in accessing the online world, which has become an increasing part of everyday personal and professional life. The impact of AMSER on community and technical college faculty will be profound. Given the high rates of adjunct faculty at these institutions, the use of AMSER will free up time for faculty to do more teaching, interact more with colleagues, and spend less time duplicating work already done by others.