Fostering Community in the STEM Talent Enhancement Program: Annual Meetings, a Community Website, and On-Line Activities

Project Summary

The NSF STEM Talent Enhancement Program (STEP) aims to address a recognized need for substantially increasing the nation's workforce capacity in STEM fields by increasing the number of students graduating in STEM disciplines from the nation's universities, colleges and community colleges. The primary vehicle for achieving this goal is through the provision of merit-based multi-year grants to individual institutions or teams of institutions to support the implementation of strategies to improve recruitment and retention of STEM students (based on best practices). The overall success of STEP depends on the development and implementation of "best practices," which in turn depends on the development of a community of PI's (practitioners) who share ideas, resources, and data, and who can build on each other's successes and experiences.

The goal of this project is to facilitate the building of a "community of practice" among the scientists, administrators, student support specialists and evaluators involved in funded STEP projects. The project builds on an award that supported: (1) planning and organizing annual STEP grantees meetings in 2010, 2011 and the upcoming meeting in 2012, and (2) the development of a pilot website to support the STEP community.

Project activities will include: (1) continuing to plan and organize annual meetings of the STEP community (in 2013 and 2014), building on lessons learned from previous STEP Grantees' meetings; and (2) continuing to develop and expand the STEP online community by (a) increasing the usability and usefulness of the community's new website, STEP Central, (b) offering opportunities for on-line training sessions and conferencing on topics of interest to the community, and (c) encouraging the involvement of the STEP community in these online activities. We will strive to seamlessly integrate these components in the development of a community of practice. Formative evaluation of these activities will support their development, and summative evaluation will measure the increases in networking and the impact of collaboration on improvement in the implementation, dissemination and innovation of individual STEP projects.

Intellectual Merit

The intellectual merit of this request lies in enhancing the opportunity to share the lessons learned from STEP projects using diverse strategies. The resulting community of investigators will be able to make significantly more progress than they would if they remained isolated. This is particularly true for investigators in programs such as STEP. Because STEP PI's and their project teams represent a diverse array of disciplines, they belong to an equally diverse set of professional societies. Consequently, they do not attend the same meetings or publish in the same journals. Furthermore, there is no professional society or journal that focuses on issues related to STEP. Hence, this project's activities, all focused on developing a strong community of practice among those involved in STEP projects, will provide important opportunities for members of the STEP community to network and share ideas with their peers. Additionally, the project will provide lessons in the development and use of on-line professional social networking sites for relatively small communities of researchers.

Broader Impact

The broader impact of the request mirrors the potential impact of the STEM Talent Enhancement Program: increasing the number of undergraduate students completing two-year and four-year degree programs in STEM disciplines. By providing opportunities for STEP investigators to share their ideas and resources, and their successes and failures, the project will assist the community in developing a collection of proven best practices that can be adopted or adapted by other institutions. Since individual STEP projects typically influence hundreds of students, this project will indirectly influence thousands of students at a diverse array of institutions throughout the United States.