



Minnesota STEM Equity Pipeline Project

Participation Guidelines

Minnesota State Colleges and Universities and the Minnesota Department of Education are jointly seeking applications from consortia to participate in projects that increase the participation of females in STEM-related nontraditional programs and careers. Consortia are invited to apply to become a site for the Minnesota STEM Equity Pipeline Project.

Applications are due by March 25, 2009 and can be emailed to dan.smith@state.mn.us. Applicants will be notified of participation by mid-April, 2009. Participation will begin upon selection and will continue during the 2009 – 2010 academic year. This program is supported by the STEM Equity Pipeline, funded by the National Science Foundation.

For further information, contact:

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Team Members

Team members will differ depending on consortium membership and goals, but should include both secondary and postsecondary partners, with a suggestion of at least 4 people per school or college. Suggestions include Perkins Coordinators, institutional researchers, professional/faculty development leaders, student support services staff/counselors, and teachers and faculty of STEM-related career clusters. It is important that at least one member of the team be proficient in data analysis, especially for nontraditional special populations. Most importantly, teams should include individuals who are in positions of influence/decision makers and/or who are implementers.

Benefits of Participation

Participating Consortium will receive the following during their participation, depending on their needs and interests:

- Training, materials, technical assistance, and professional/faculty development. This will include training in the Five-Step Program Improvement Process. This training is best done at two different times with time in between for research and conversation. Training will be conducted on-site.
- Guidance in conducting root cause research, which may include conducting student and faculty surveys, interviews, and/or focus groups to validate a team's hypotheses about the barriers women are facing to entering or completing nontraditional STEM related career cluster programs of study.
- Future funding possibilities from business contacts and professional organizations.
- Connections with business partners via the Office of the Chancellor Strategic Partnerships Unit and Centers of Excellence.
- Limited mileage reimbursement.
- Support and tools to meet your nontraditional student population goals.

Expectations of Participation

Expectations of participating consortia include:

- Investment of about 8 days over the next year, including 1 day for orientation, 2 days for training and 3 – 6 days for analyzing data, conducting root cause research and analysis, and selecting an implementation strategy. We recommend that the team meet monthly while conducting research, with distribution of responsibilities for intermediate work assigned equitably to team members depending on their ability to integrate the work into existing job activities.
- Identification of an implementation strategy (new program development, faculty workshops, etc.) designed to increase the participation and completion of women in nontraditional STEM-related career cluster programs of study. The pilot sites must be willing to invest human and financial resources into implementing an identified solution.
- Potential commitment of resources to implement programming.
- Reflection of participation in Perkins plans turned in Spring 2010.

Data Submission

In order to complete a performance gap analysis of the STEM related CTE programs at the pilot sites, the following data will be used:

- For total CTE programs, enrollment and completion data (as defined by Perkins IV) disaggregated by gender, race/ethnicity and special population status from the last 3 – 5 years
- For total Nontraditional CTE programs, enrollment and completion data (as defined by Perkins IV) disaggregated by gender, race/ethnicity and special population status from the last 3 – 5 years

- For each STEM related CTE program, enrollment and completion data (as defined by Perkins IV) disaggregated by gender, race/ethnicity and special population status from the last 3 – 5 years

Each consortium is expected to designate at least one person who will be responsible for working with staff from the Minnesota State Colleges and Universities and the Minnesota Department of Education to ensure the availability and validity of data from all schools/colleges that are part of this team.

Acting as “Extension Agents”

The members of the pilot site teams will be expected to share lessons learned as well as train others in the process through a variety of methodologies. These could include conducting workshops at state or regional sponsored professional development, writing articles for state newsletters and publications, conducting online training with others, and working one-on-one with other college and high school teams interested in implementing the process to improve their performance on the Perkins nontraditional core indicators. Every member of the pilot site team should be prepared to assist in this endeavor once the pilot process has been completed.

Selection criteria

- Documented need for improvement in nontraditional participation and completion rates in STEM-related career clusters (consistent with data available to the State Leadership Team).
- Clear statement of specific needs and goals for increasing participation and completion in STEM or STEM-related nontraditional occupations and programs (from Perkins plan and application).
- Willingness to form a team that includes both high school and college representatives from the consortium (from application).

Timeline

April, 2009	Notification of Participation
May or June, 2009	Orientation Meeting for full team at each site
Fall, 2009	Training on STEM Equity Steps 1 – 5, Analysis
Winter, 2010	Development of Implementation Plan
Spring – Fall, 2010	Implement Projects
Spring, 2010	Perkins plan reflects participation in project



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