

Strategies for Recruiting Underrepresented Populations into STEM Fields

Background

The National Resource Center for Materials Technology Education (MatEd) is funded by the National Science Foundation; an Advanced Technological Education (NSF ATE) initiative. MatEd is developing an online collection (www.materialseducation.org) of instructional materials that can easily be integrated into a variety of courses, classroom settings, and industry. The MatEd collection is expanding rapidly, providing material for science labs, hands-on demonstrations, modules, and papers. MatEd's goals are to advance materials technology education nationally; disseminate industry-approved core competencies for technicians who handle materials; facilitate industry, education, and community collaborations to meet materials technology workforce needs; and provide easy and direct access to Web-based resources and professional development opportunities. MatEd is housed at Edmonds Community College in Lynnwood, Washington, and is creating a national network by partnering with industry, high schools, and higher education institutions, including other NSF ATE-funded centers and projects.

One of these projects was a special research project called Proven Practices in Recruiting Women into STEM Fields. This research project gathered information that assisted in the identification of successful practices/strategies used by NSF-funded centers and projects to recruit females into STEM fields. The research activities focused on how each center and project identified which strategies worked best for them, and how these strategies and/or activities were implemented.

After an extensive literature review and initial information was compiled, the project conducted a national survey that helped to identify NSF-funded ATE centers and projects that would be appropriate candidates to participate in this research project and that met the project's criteria. Following the survey, the Proven Practices in Recruiting Women project team visited selected sites; conducted focus groups at those sites; facilitated one-on-one interviews with faculty, students, and administration; and toured STEM programs. All of these activities allowed the project team to gather additional information. Attention was also given to NSF centers and projects located in areas that served underrepresented populations.

Documented Results

Based on this research, the Proven Practices project developed a summary tool that has been shared at workshops, conferences, roundtable events, and presentations. Several centers and projects preparing to submit for funding have used this tool to streamline and align their recruitment strategies and efforts with the NSF and other funding organization requirements. MatEd has been incorporating the findings of the Proven Practices research project into many of the professional development activities it has offered. Since 2010, over 600 people have attended MatEd workshops and events.

For More Information

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