Best Practices from the CCTA: Centers Collaborative for Technical Assistance The National Science Foundation's Advanced Technological Education (NSF ATE) program focuses on the education of technicians for the high-tech fields that drive the nation's economy. The faculty members of community colleges, which are the main source of technician education in the United States, have leadership roles in the initiatives that involve partnerships with industry and other educators. Since 1994, NSF ATE initiatives have developed a wide-range of innovations to better serve students and inform educators.

Five NSF ATE centers formed the Centers Collaborative for Technical Assistance (CCTA) in response to a Department of Labor request to NSF for technical assistance services to recipients of Trade Adjustment Assistance Community College and Career Training grants. The five centers are National Center for Convergence Technology (CTC), South Carolina ATE National Resource Center (SCATE), Florida Advanced Technological Education Center (FLATE), Bio-Link National Center (Bio-Link) and Maricopa Advanced Technological Education Center (MATEC). The identification and sharing of NSF ATE best practices are among the services CCTA offers.

EFFECTIVE OUTREACH AND RECRUITMENT

When reaching out to special populations, be aware that one size does not fit all. Understanding the culture and priorities of the target population requires research in advance and thoughtful planning.

This best practice publication focuses on strategies that ATE centers and projects have found effective in increasing the enrollment of three specific populations: veterans, Hispanics, and women.

Attention to cultural differences is key when reaching out to special populations. For instance, 79% of Latino parents who participated in a Pew Hispanic Center survey reported that they are involved in their children's career decisions.¹ Helping others and making a difference—rather than income—are career priorities for many women. Veterans value camaraderie and environments where they can connect with others who have served in the military.

CONNECT WITH SPECIAL POPULATIONS

- Leverage resources within the college and community to educate yourself and colleagues about the special population.
- Select organizations strategically to learn about the culture of the special population.
- Build relationships with employers to provide internships and jobs for students from special populations.
- Partner with public service agencies and community organizations to provide wrap-around services to help students from special populations persist in their academic plans.

FOCUS GROUPS FOR RESEARCH IN ADVANCE

Convening focus groups with 2 to 10 students can provide insights into the culture and priorities of the population a college seeks to recruit.

- Ask faculty to recommend students to participate and to introduce you.
- Communicate directly with students (in-person or via text, email, or phone) to set up a mutually convenient meeting time.
- Hold the focus groups in the buildings where students attend class.
- Begin with open-ended questions about what they are studying and why, before seeking advice on how to approach the special population.
- Afterward seek the students' feedback on the recruitment brochures and videos created with their input.

VETERANS TO STEM CAREERS

To recruit military service members as they transition to civilian life, work with the education services officer and transitions service officer at the nearest military base.

WHEN DEALING WITH VETERANS

- Respect the rank they earned.
- Acknowledge the responsibilities they carried out while in the military.
- Do not assume a veteran is college ready.
- Offer special orientation sessions for veterans that include their families.

College-employer partnerships that provide veteran students with part-time jobs in STEM fields ease personal financial constraints and help with the transition to the civilian workforce.

REACHING OUT TO HISPANIC POPULATIONS

Translating brochures from English to Spanish or using Spanish subtitles on videos made for English-speaking audiences are not sufficient to communicate with Hispanic populations. Translations alone may miss the language nuances that either compel or repel.

Craft marketing materials specifically for the special population to include Hispanic individuals and authentic representations of their homes and communities in photos and videos.

RECRUITING WOMEN TO STEM

To recruit women, help them see themselves in STEM careers by

- featuring successful women in STEM careers in marketing materials;
- highlighting recent female graduates in their workplaces;
- emphasizing how STEM careers help others;
- pointing out that STEM careers involve working in teams and solving problems; and
- providing information about salaries and employment demand.

Resources for Recruiting Women

National Center for Women & Information Technology: www.ncwit.org

National Institute for Women in Trades, Technology and Science: www.iwitts.org

EFFECTIVE STRATEGIES

To recruit women, veterans, Hispanic students, and other students from special populations for STEM careers, go where potential students are on campus and in the community.

- Present STEM career information in developmental education courses and in GED classes.
- Participate in programs for high school guidance counselors.

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- Provide guidance counselors with marketing materials that are geared toward informing parents.
- Partner with the training coordinator at the area unemployment office and the Workforce Investment Board.
- Utilize social media.

Sources: 1. The Pew Hispanic Center and the Henry J. Kaiser Family Foundation. National Survey of Latinos: Education. Los Angeles: University of Southern California Annenberg School of Communication, 2004.

CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE

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ATETV.org created a series of Spanish language videos to inform Hispanic populations about STEM technician careers. bit.ly/atetveducaciontecnica

CCTA Webinar on Effective Outreach and Recruitment of Special Populations: youtube.com/watch?v=cl0pX5CJkbw

Asheville-Buncombe Technical Community College's Picture Yourself in STEM marketing materials will be available in customizable templates for free. For some of its posters, the college replaced the photographs of technicians' faces with mirrors to give viewers a glimpse of how they would look working in a STEM field.