Best Practices shared by 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 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.

MOVING UP TO LARGER NSF ATE PROJECT GRANTS

The following tips are intended to help people seeking larger project grants from the National Science Foundation's Advanced Technological Education (NSF ATE) program. The tips have been tailored to assist two-year college educators who have been principal investigators (PIs) of Small Grants for Institutions New to ATE and others who have had previous grants outside of the ATE program.

This information is a synthesis of the wisdom shared during a roundtable discussion at the 2016 ATE PI Conference. The discussion participants included NSF program officers, other ATE PIs, and other individuals from the ATE community.

15 HELPFUL TIPS

- 1. Results of prior support matter. Wait to submit a new project proposal until there is a clear rationale for additional support. The new proposal should not only include evaluation data from prior support, it should answer the following questions: What did you learn during the previous project? How do you know it? What good was accomplished? Why do you need more money? How will additional funds leverage the first project to catalyze something new?
- 2. Read the most current program solicitation carefully to assure that your ideas align with the program's goals. Program requirements change and there may be new opportunities that better fit your needs; some opportunities that were available in the past may no longer be offered.
- 3. Make sure the college's authorized organizational representative (AOR) knows and follows the requirements detailed in the *NSF Proposal and Award Policies and Procedures Guide* (PAPPG). While PIs lead the creative development of proposals, those PIs and OARs who use this resource to answer procedural questions help assure that their proposals comply with NSF expectations.
- 4. Follow the appropriate instructions for supplementary documents' content and formatting. The program solicitation's stipulations for these important documents take precedence, in the event there is a conflict with the PAPPG.
- 5. Prepare a one-page summary of your new project well in advance (e.g. six months or more), send it to a program officer, and then arrange for a phone call to discuss it. Preparing a graphic representation of your project (e.g., logic model) will help you to understand the components' connections and project's flow. This illustration may be sent to the program officer with the project summary.
- 6. Contact principal investigators (PIs) at institutions that have received second ATE awards. Ask them about the lessons they learned about the grants process. Request copies of their funded proposals, but be careful not to replicate errors. Ask what modifications, if any, were made to the project prior to funding (e.g., errors, omissions, or requested changes that had to be addressed from what was initially proposed). For example, a proposal may have included student scholarships. Because student scholarships are not an allowable expense in ATE projects, the program officer would have requested that this expense be eliminated and the budget revised accordingly. When you read these proposals, ask yourself about what would have made these proposals appealing to reviewers and relevant to the ATE program.
- 7. Make sure that your budget request matches the scope of your project, the number of partners, and potential sub-awards. Do not automatically ask for the maximum amount for projects. It is a weakness to request too much; there should be a compelling reason for each dollar requested. Successfully completing a smaller scope of work and then moving up slowly (e.g., from \$200,000 to \$400,000 or \$500,000) will likely result in a stronger proposal than trying to make the leap from a \$200,000 project to a maximum request.



TIPS CONTINUED

- 8. Be clear about the scope and importance of your proposal to address local employers' needs by including relevant local data and evidence in the proposal. Local project outcomes should then link to regional, national, or global trends for broader impact and dissemination.
- 9. Utilize good communication skills to develop the proposal with a team that has sought the input of colleagues in other disciplines, the college administration, and industry.
- 10. Choose partners strategically and cultivate their ongoing involvement. The sidebar has suggestions for developing the robust partnerships necessary for success in the ATE program and for showing evidence of them in a proposal.
- 11. Don't try to go beyond what your institution and its broader community of stakeholders value and are able to help carry out. Aim your innovations where you already have a base of support and build on that support. It is important to stay focused. Do not "chase rabbits" by running off the path in pursuit of things that are not part of the project. New ideas will likely surface as you are completing one project; save those ideas for a future project.
- 12. Include consultants and advisors in the project to provide additional expertise. If their expertise is vital to the project, include their vitae (e.g., the evaluator or a person who will provide a workshop on a critical component) and a commitment letter from them that explains their willingness to participate.
- 13. Use Mentor-Connect resources and grant development principles.
- 14. Take evaluation seriously. Work with an evaluator who provides feedback and suggestions for improvement and does not just crunch numbers.
- 15. Be prepared to receive funding even if you thought that you were putting in a proposal to obtain feedback. You might be surprised.

CCTA

More on Tip #10: Effective Partnerships Expand Impact

As an ATE subsequent grantee you will not only be building on what you have accomplished, but you will be expanding your impact.

- Recruit diverse partners to explore what works, for whom, and under what circumstances.
 - Ask your partners to prepare authentic commitment letters that describe their precise role in the new project. Three good letters are much better than ten letters that look just alike or that promise nothing. (Note: Read the current ATE solicitation carefully to see what you can include in the supplementary documents. The FY 2017 solicitation allows letters of commitment, but not generic support. However, rules can change. You may keep the letters and mention in the body of the proposal that you have them and what the partners commit to providing.)
 - Align your project with college priorities and documented community workforce needs. Don't propose to do something just because you heard that it is the latest "cool new thing." Ask yourself if the college and the community is ready for it and if there are jobs for program completers. Do not go off in an entirely new direction or chase after a new industry that might come to the region in four or five years.
- Say "yes" to productive new partnerships. You can be a leader in one project and a team player in another project.
- Do not be afraid to drop a partnership that is not working. If you have had someone at an institution or company who was a true partner with a deep commitment to your project and that person leaves without a colleague "stepping up" to help with the project, find another partner. Also, not all partnerships are productive. If a partner does not deliver or is difficult to work with, do not include that partner in a new proposal.
- Make sure your team includes people with passion for the project, commitment to achieving its goals, and capacity to show up for meetings and follow through on commitments.
- Name the other people at the college who will be involved. For example, if there is a career coach on campus who will help you recruit students, include his or her name in the proposal and describe his or her role. Name faculty who will serve as mentors and team leaders even if they are not PIs.

CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE

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