



# **PRACTICAL GUIDE** FOR IMPLEMENTING YOUR NSF ATE PROJECT

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Cyber/IT Faculty Grant Development and Mentoring Project

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## The National CyberWatch Center *Practical Guide for Implementing Your NSF ATE Project*

### I. Congratulations!

Your project has just been recommended for funding! You have worked hard to produce a winning proposal. The task in front of you, project implementation, is even more challenging and, at times, will be daunting. This *Guide* offers practical suggestions to help drive your project to success. You are NOT required to do any of it except as noted, but you will find useful tips that you can adopt/adapt yourself.

**WARNING** - Institutions new to NSF or ones that have no active award in the past 5 years will be required to work with the NSF's Division of Grants and Agreements (**DGA**) to submit a "new performer" packet. This will need to be completed and approved before the Division of Undergraduate Education (**DUE**) can formally recommend your award. The *NSF New Performer Guide* can be accessed at [https://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=pnag](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pnag)

If the institution has had a small, new to ATE award or any other NSF award and reaches the total funding threshold of \$500,000, the proposal will have to be submitted to the NSF Cost Analysis and Pre-Award (**CAP**) branch which can be a long process. If you are asked to prepare the new performer packet, it is strongly recommended that you consult one of the grant development principals or your mentor for advice. Remember, if information is requested of you, the answer is always "I will work to get that to you." The new performer packet is sent to the college's Authorized Organizational Representative (**AOR**), rather than one of the PIs. If the AOR has changed since the proposal was submitted, it is important, once negotiations have started, to let the NSF program officer know immediately.

Each of the sections below include an indicator of when, in the time frame of the awarding of the grant, these request for information or action items will likely occur. This *Guide* uses the following time periods, alerting you to actions required within the grant's implementation:

1. Prior to the award
2. After receipt of official award notification
3. First three months into the award
4. Annually
5. Post award

Please refer to the Implementation Checklist, found on page 11.

## II. Response to NSF Questions

### ***Prior to the Award***

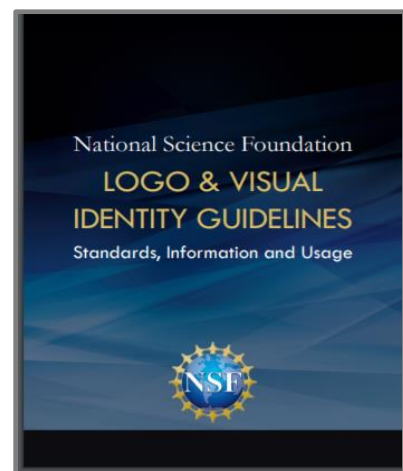
Once your proposal is recommended for funding, but before your institution receives the official award letter, the PI will likely be asked several questions from the NSF Program Officer assigned to your project. This limbo stage is often referred to as being in the “NSF tunnel.” It is crucial that these questions are answered thoroughly, and your response is submitted in a timely manner. You are encouraged to contact your mentor for assistance with crafting the answers to these questions. Mentors are experienced in responding to these types of “tunnel” questions from NSF.

## III. Marketing and Communication

### ***Prior to the Award***

Receiving questions from NSF regarding your project is a strong indication that your project will be funded. Before the official announcement is received you need to:

- Prepare a press release about your project for an external audience. The press release should be approved by the dean and/or senior administration of the college. It is best to give the final draft to the marketing or publication department at your institution for any last-minute tweaks prior to approval by administration and broad external dissemination.
- Prepare a press release for the internal, institution-wide audience. This one differs by adding references to the department involved in the grant and the names of faculty and/or administrators on the project.
- Prepare a one-page, more extensive description of your project for senior administrators to use when they speak about it. Modifying the one-page Project Summary from your grant proposal is a good place from which to start.
- Remember once your College President receives the official award letter, any publicity about your project must include the NSF logo. You are allowed to use any of the approved NSF logos that are found on the NSF site at <https://www.nsf.gov/policies/logos.jsp>. Additionally, it is advised to download the *Logo & Visual Identity Guidelines* document that will provide clarity on how NSF logos should be used.



- Develop a statement that gives NSF credit for the funding and specifies that the project will be executed by your institution. This statement is applied to all digital and printed works that are derived from your project and should use the following standard language:

**“This material is based upon work supported by The National Science Foundation under ATE Grant DUE # xxxxxxxx. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.”**

### ***First Three Months of the Award***

Once you have received the official notification of the award, there are several steps to be completed:

- Inform the senior administrator/s and share your internal press release and the one-page description/summary
- Inform the marketing/publication department and ask them to disseminate the press release
- Inform members of your Advisory Board (if you have one) and send them the one-page summary
- Inform all project collaborators about the award and share the one-page summary with them. You should also offer them a copy of the press release so that the information can be further distributed by your partners/collaborators, and the format and content remain consistent.
- Inform the project Leadership and/or Management team and share both the press release and the one-page summary so that they, too can market the project
- Develop a flyer or an attractive brochure describing your project, intended impact, collaborators (if any), its duration, and other pertinent information (without details). Project Leadership and/or Management Team members should be included on the flyer.
- Share the information about the project on the college’s website
- Ask permission of your administrator for 10-15 minutes during a faculty assembly (at the beginning of a semester) to share information about your project
- Submit a request to your administrator to present the project to the Board of Trustees
- If you will be developing your own website for the project, you will want to discuss the preferred method of linking it to your college’s website with your college’s webmaster.

## Annually

Your project's developments and successes ought to be shared as widely as possible. Examples and suggestions include:

- Prepare a list of accomplishments during the year to be shared internally with the senior administrators and the marketing/publication department. Share it also with your collaborators and members of the Advisory Board.
- Plan to broadly advertise any event you hold on your campus as part of this project (e.g., faculty training, student competition, local school event). Creating a list of where to advertise will be useful throughout the project award period.
- Send the information to your NSF Program Officer (PO). If you are having an event, it is always appreciated to send an invitation to your program officer. However, because of limitations in their own travel funds, their attendance is not guaranteed. Remember that NSF can also help disseminate your accomplishments if they know about them!
- Prepare materials for the next ATE Exhibit Hall. You are *required* to attend the annual ATE conference typically held during the third week of October in Washington, DC. If your original budget did not include travel funds to cover attending this conference, then this is one item that you will need to remember for future grant submissions. Your role at the conference is not only to attend information sessions, but also to participate in the Exhibit Hall. Materials are brought to showcase your project and to share the information with other attendees. Plan your display to contain promotional materials, posters, banner (optional), or video display. The annual ATE Showcase is attended by several hundred people and provides an outstanding opportunity to learn, show, and network.



ATE PI Showcase photos are courtesy of the American Association of Community Colleges.



## **IV. Project Management**

While effective communication is important in all facets of the project, it is crucial for the members of the Leadership and/or Management Team. Some suggestions for the effective management of the project are listed below:

- Delineate the responsibilities of each member of the Team and ensure their complete agreement with it
- Share the complete project proposal with all members of the Team. NOTE: It is typical to extract the budget pages before distributing the proposal.
- Ensure strong staff support and include them in the meetings and discussions
- Include the project evaluator in the meetings and discussions
- Schedule a meeting with your industry partners
- Develop a Team Calendar identifying periodic (bi-weekly/monthly) meetings of the Team. Invite your administrator to some of these meetings.
- Set deadlines whenever possible, even if they may slip. Make sure all project personnel are aware of the deadlines.
- Develop an Agenda for each meeting and distribute it to your team prior to the meeting
- With the help of the evaluator, develop a table of project objectives to assist in tracking their progress when reviewed during the Team meetings
- Make sure to keep your administrators informed and work with them to nurture a sense of pride in your institution's receiving an NSF award.

## **V. Data Management**

An important responsibility you have is to consistently and effectively monitor data generated by the project. Some tips:

- Develop sign-in sheets that can be used for different grant-sponsored activities to record involvement. This includes events, meetings, presentations, and training.
- Use both an approved NSF logo and your institution's logo on sign-in sheets
- Use the sign-in sheets to gain information about the participants, such as contact information, institutional affiliation (faculty and students), state (where applicable), type of students (e.g., freshmen, sophomore, part-time, full-time) and any other information that might be useful in participant analysis and future outreach
- Keep track of all participants since you will be required to provide this data to NSF

## VI. Budget Issues

Monitoring the budget and doing it within the parameters set by NSF is essential to the success of your grant-supported project. There is always a possibility of an audit for which you and the institution need to be prepared. Every expenditure needs to be well documented and approved. Working with your Accounting Office and building mutual trust and solid working relationship is particularly important. Some points to be aware of are as follows:

### ***Prior to the Award***

Each of the points below carries a high level of importance and involves preparations and discussions that need to occur following your receipt of the award letter:

- When the proposal is forwarded to the Division of Grants and Agreements (DGA), then the PI and the AOR must answer any remaining financial questions
- A designated person from the Accounting Office (or another office identified by the college) must be registered on the NSF site as the college authority to draw down the expended funds from NSF's Award Cash Management Service (ACM\$) (<https://www.nsf.gov/bfa/dfm/docs/CashManagementFAQs.pdf>). It cannot be said more clearly: Checks in the amount of the award are not sent to the college upon your award. The NSF award letter is all the college receives. It essentially enables a line of credit that your accounting office taps into to request reimbursement for expenses accrued by the grant. In short, you spend, and NSF reimburses.

### ***First Three Months of the Award***

The following bullets describe typical “gotchas” that can make your life miserable if not attended to early on in your project. Covering these points with your Finance Department personal will save you many future headaches if everyone understands how the funds will be requested and disbursed.

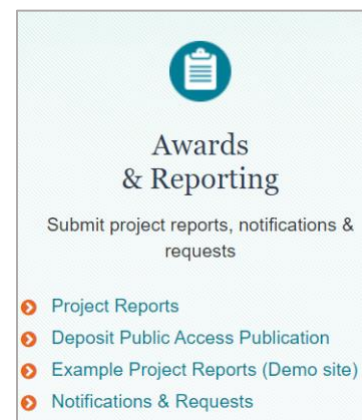
- The categories on the NSF Budget Form are frequently not the same as the ones at your college. You will need to work with your Accounting Office to set up separate categories for billing that are aligned with the NSF Budget Form.
- While drawing funds down is not the PI's responsibility, you may need to remind your Accounting Office periodically to do so. NSF works on reimbursables; colleges develop their own timeline for drawing down funds (e.g., monthly, quarterly).
- It is also important to remind the Accounting Office to draw down the indirect cost funds periodically
- You need to ensure that you, as the PI, have access to the budget of your project so that you can monitor the status of the funds. One approach is to request read-only access to

systems or reports on demand. Remember that you are responsible for all aspects of the project including the budget.

- You need to use funds judiciously. A frequent mistake made by PIs is to be overly frugal in their money management, not using the available funds, only to find themselves in the last project year with too much money. Conversely, some PIs feel that there is an abundance of funds and use it too generously at the outset, only to find there is little left to support the final year of the grant.
- If you are not sure if NSF allows the use of funds for certain expenditures such as “giveaways” or recognition gifts or anything remotely questionable, consult the NSF Allowability of Costs guidelines at [https://www.nsf.gov/pubs/policydocs/pappg18\\_1/pappg\\_10.jsp](https://www.nsf.gov/pubs/policydocs/pappg18_1/pappg_10.jsp)
- Typically, the food for meetings and events can be justified if these are “working meeting” or events. As evidence of a qualifying event that includes food, you will be expected to prepare a written agenda for the meeting with names and topics included. Always consult the NSF guidelines cited above to be absolutely sure your assumptions are correct.

## VII. Reporting

An important and required part of your project is report submission. Different categories of reports that you will be expected to produce include periodic progress reports, annual reports, the final project report, and the project outcomes report. These reports are testaments to the project’s accomplishments, and as such can be used in part or in totality for marketing purposes. Reports are submitted through the Research.gov site.



### ***Some important tips:***

- Time and Effort personnel compensation reporting is a requirement for anyone receiving grant-funded compensation, including an adjunct faculty teaching to provide release time for another person, and anyone receiving grant-funded release time. Forms that meet NSF expectations and instructions are available from the Mentor-Connect Resource Library at <https://library.mentor-connect.org/> and search for “time and effort.”

- Periodic progress reports are not required by NSF. However, they are particularly useful for self-monitoring and documenting the progress of the project. They are also highly effective in communicating the progress to the senior administration, your advisory board, and any other affiliated organization. They also will serve as the basis for your annual report.
- You may want to share an abbreviated progress report with your NSF program officer to keep her/him continually updated. (You always need to be mindful of the Project Director's time and send ONLY an abbreviated summary.)
- Annual reports are required by NSF and need to be submitted to research.gov under reports as part of your project. You may want to use the NSF template to list all the accomplishments of the past year, note progress on goals and objectives, and briefly describe plans for next year. It is wise to solicit input from your Co-PIs for inclusion in the report.
- Be sure to attach the Annual Evaluation Report to your annual report. Do not copy and paste the evaluator's report text into the annual report.
- Share the annual report with the college administrators, faculty, staff involved in the project, your department; placing it on your project website is suggested to assist with wider distribution.
- The final report submitted to NSF is equivalent to the last year's annual report. You are only required to include information from the previous year. However, it is to your advantage to include a listing of all accomplishments from the project's beginning and make it a cumulative report. This allows you to use the report for marketing and for referencing in future grant requests.
- Include the external evaluator's final evaluation report (cumulative in nature) in your final report
- The project outcomes report (POR) is written for the general public and not for your NSF Program Officer. At the end of your project, the Principal Investigator submits the POR in Research.gov. Instructions for preparing and submitting your POR are available by logging onto Research.gov and clicking on Project Outcomes Report. The Frequently Asked Questions site is available from <https://www.nsf.gov/pubs/policydocs/porfaqs.jsp>.
- You are required to showcase at the annual ATE PI Conference. If this event is close to the beginning of your project timeline, your first showcase will be a description of your project and the activities and objectives that you have planned. In subsequent years, your display will include information on all significant events and activities that were completed in the previous year.

- You are also expected to submit information to the EvaluATE site that collects data from all ATE projects. It can be found at <https://www.evaluate-ate.org/>. EvaluATE will send you the request for information in February or shortly thereafter. You may wish to look at summary reports from prior years to see what type information is requested. These can be found at [https://www.evaluate-ate.org/annual\\_survey/](https://www.evaluate-ate.org/annual_survey/). It is especially important to complete this survey as the ATE Program uses this summary information to provide updates to NSF administrators and Congress to demonstrate the impact of and ongoing need for the ATE Program.



## VIII. Working with the Evaluator

The role of the evaluator and the relationship with her/him is essential to the success and impact of your project. This important member of your team will not only document what has been accomplished but also keep you aware of how what you're doing matches with what you said you would do in your grant. Deviations from what was outlined in the project will always need to be explained and justified. Your evaluator will be the best team member to provide you with that needed perspective.

### ***First Three Months***

The following points are listed here to assist you in developing a healthy working relationship with your evaluator right from the start. It will be prudent on your part to engage the evaluator as soon as your award letter arrives.

- Share the narrative of the proposal with your evaluator
- Introduce the evaluator to the administrator, department chair/dean/VP
- Share the project calendar with the evaluator
- Include the evaluator in the monthly leadership meeting and seek her/his input
- Ask the evaluator for her/his detailed plan and ensure that the evaluator's plan is aligned with the evaluation

- Your evaluator can be immensely helpful with collecting data and data management, so she/he needs to be involved

### **Annually**

- Ask the evaluator to prepare quarterly reports to be included in the Progress Reports
- Ask the evaluator to prepare the Annual Report to be included as part of your Annual Report
- The EvaluATE Center hosts regular webinars on working with an evaluator and having successful evaluation and assessment activities that inform your project. You may want to sign up to receive notifications from EvaluATE on these webinars, and let your evaluator know about them.

## **IX. Summary**

While this *Guide* compiles a substantial list of “to dos” in project implementation for the newly funded, it is *not an exhaustive list*. The detail within this document can be used as a reminder and checklist for steps to take and tasks to complete at certain times during the life of your NSF project. The collection of authors that provided this content have extensive experience with project implementation and have encountered some of the challenges that the *Guide* is addressing.

We wish you success in your grant-funded project and look forward to hearing from you. We also view this *Guide* as a “living document” that will improve with time and with additional comments provided by practitioners like yourself. Please email Elizabeth (Beth) Hawthorne at [ekhawthorne@gmail.com](mailto:ekhawthorne@gmail.com) with any suggestions for improvement to this *Guide*.

## X. Implementation Checklist

The Implementation Checklist can serve as a reminder of the various project activities. It is a planning tool to help keep your project on pace and bring it to fruition. Feel free to make copies of this checklist as is or modify it as needed.

<i>Done</i> ✓	<i>Timeframe / Task</i>
	<b><i>Prior to the Award</i></b>
	<ul style="list-style-type: none"> <li>• Respond to NSF “tunnel” questions</li> </ul>
	<b><i>Comments:</i></b>
	<b><i>After the Receipt of Official Award Notification</i></b>
	<ul style="list-style-type: none"> <li>• Marketing and Communication</li> </ul>
	<b><i>Comments:</i></b>
	<b><i>First Three Months into the Award</i></b>
	<ul style="list-style-type: none"> <li>• Marketing and Communication</li> </ul>
	<ul style="list-style-type: none"> <li>• Work with College accounting office to establish budgeting procedures and setup an account with the NSF Award Cash Management Service to routinely drawn down grant funds.</li> </ul>
	<ul style="list-style-type: none"> <li>• Notify Evaluator of NFS award and setup meeting schedule.</li> </ul>
	<b><i>Comments:</i></b>
	<b><i>Annually</i></b>
	<ul style="list-style-type: none"> <li>• Dissemination at the ATE PI conference and other venues</li> </ul>
	<ul style="list-style-type: none"> <li>• Annual reports by PI and Evaluator</li> </ul>
	<b><i>Comments:</i></b>
	<b><i>Post Award</i></b>
	<ul style="list-style-type: none"> <li>• Project Outcomes Report</li> </ul>
	<b><i>Comments:</i></b>

## **XI. APPENDIX**

### ***Definition of Terms and Acronyms***

#### **AOR – Authorized Organizational Representative**

An Authorized Organizational Representative (AOR) is the individual who is authorized to sign on behalf of the proposing organization. It is the organization's responsibility to determine -- and identify within the FastLane system -- which individual(s) will have the authority to electronically sign the proposal and provide the required proposal certifications.

Reference: <https://www.nsf.gov/bfa/dias/policy/docs/esignfaq.jsp>

#### **ATE – Advanced Technological Education**

With an emphasis on two-year Institutions of Higher Education (IHEs), the Advanced Technological Education (ATE) program focuses on the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions (grades 7-12, IHEs) and industry to promote improvement in the education of science and engineering technicians at the undergraduate and secondary institution school levels.

Reference: <https://www.nsf.gov/ate>

#### **CAP – Cost Analysis and Pre-Award branch**

NSF's Cost Analysis and Pre-Award (CAP) Branch (CAAR) conducts the Financial Capability Review on behalf of NSF. The CAP Cost Analyst gathers and reviews the information from the potential awardee and makes an overall assessment of the prospective awardee's financial viability over the proposed award period.

Reference: <https://www.nsf.gov/bfa/dias/caar/fin.jsp>

#### **DGA – Division of Grants and Agreements**

DGA is responsible for the award of NSF grants and agreements recommended for support by NSF program offices. From pre-award through closeout, DGA conducts a variety of business, financial, and award administrative reviews to ensure compliance with award terms and conditions, NSF policies and procedures, and Federal rules and regulations.

Reference: <https://www.nsf.gov/bfa/dga/>



**DUE** – Division of Undergraduate Education

The mission of DUE is to promote excellence in undergraduate science, technology, engineering, and mathematics (STEM) education for all students.

Reference: <https://www.nsf.gov/ehr/duel/about.jsp>

**NSF** – National Science Foundation

The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." NSF is vital because we support basic research and people to create knowledge that transforms the future.

Reference: <https://www.nsf.gov/about/>

**PO** – Program Officer

The NSF program officer reviews the proposal and analyzes the input received from the external reviewers. After scientific, technical and programmatic review and consideration of appropriate factors, the program officer makes an "award" or "decline" recommendation to the division director.

Reference: <https://www.nsf.gov/about/how.jsp>

**POR** – Project Outcomes Report

The Project Outcomes Report is a brief summary, prepared by the Principal Investigator (PI) or Co-PI specifically for the public, describing the nature and outcomes of the project. Section 7010 of the America COMPETES Act requires that research funded by NSF report on the outcomes for the general public. These reports are available for public viewing on Research.gov at the bottom of the Research Spending & Results detail page for the particular award. A particular award can be located using the search feature on Research.gov.

Reference: <https://www.research.gov/common/attachment/Desktop/POR-Preparing and Submitting-Quick Reference Guide.pdf>

**RESEARCH.GOV**

Research.gov provides grants management for the research community. Research.gov will become the replacement for FastLane, providing quick access to research information and grants management services, all in one location.

## **NOTES**



**WWW.NATIONALCYBERWATCH.ORG**

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