Establishing Claims and Providing Evidence of Effectiveness of ATE Grants

Here are some common types of evaluation reports.

Think about which one best represents the evaluation reports you've seen in the past. NSF is pushing for more and better evidence of project effectiveness. The exercises on the following pages are intended to help ATE grantees and their evaluators think about what that means for their work.

> "The PI should establish claims as to the project's effectiveness, and the evaluative activities should provide evidence on the extent to which the claims are realized."
> —2010 ATE Program Solicitation

	Body Count	Opinion	Description	Claims + Evidence
EXCERPT FROM EVALUATION REPORT — EXECUTIVE SUMMARY	The *TechCommunications Project* • Developed two courses (*Communication Skills for Technicians* 101 and *102),* including stand-alone modules and activities that can be used in other courses. • Enrolled 150 students in *Communication Skills for Technicians 101* and *102* at three of the five Omni Community College campuses • Involved 10 faculty and 25 business and industry representatives in the curriculum development process….	The *TechCommunications Project* is to be commended for its extraordinary efforts to engage business and industry representatives and faculty representing diverse technical fields in developing the course curriculum. Feedback from these groups provided invaluable insights for improving the materials. The evaluator observed remarkable improvement in students' communication skills over the two-semester sequence. Students appeared to be receptive to the course's very practical content and activities….	The *TechCommunications Project* met its goal to develop two courses designed to enhanced students' communication skills. The curriculum development process was completed in Year 1, with input from faculty and business representatives. Courses were piloted on three campuses in Year 2. The course curriculum is available at www.projectsite.org. It is divided into three modules, focused on writing, presenting, and group facilitation, with associated activities. Instructional strategies include peer feedback on self-reflection. In response to an end-of-course survey, 75% of students said they were "satisfied" or "highly satisfied" with the course….	The *TechCommunications Project* has resulted in substantial increases in students' facilitation and presenting skills. Trained, blinded (i.e., they did not know which students were enrolled in the project courses) raters assessed the majority (80%) of *Communication Skills for Technicians 101* and *102* students to be "proficient" in group facilitation and presenting, whereas they rated one-third of nonenrolled students as "proficient." Ratings of student writing were similar among all students, showing the course had no effect on writing skills. Qualitative findings from student interviews revealed that, in particular, the peer feedback played a key role in helping them to develop their presenting and facilitation abilities….

STEP 1: Establish your claim regarding impact.

Tips:

- Impacts may include changes in knowledge, skills, abilities, performance, practices, policies, and access.
- Impacts may manifest at the individual, program, institution, organization, regional, or national level.
- Impacts may be short-term, long-term, or anywhere in between. Focus on impacts likely to occur before your grant expires.
- Good evaluation questions cannot be answered with a 'yes' or 'no.'

Who/what will be impacted?		What will be different for them as a result of your project?	What evaluation question should be answered in order to make a claim about this impact?
EXAMPLE	Students who complete *Communication Skills for Technicians 101* and *102* at the three Omni Community College campuses where the courses are being piloted (approximately 150 students per year).	They will have improved communication skills, especially in the areas of business writing, public speaking, and small group facilitation.	To what extent do students' communication skills improve as a result of completing *Communication Skills for Technicians 101* and *102*?

STEP 2: Determine what indicators you will use to observe/measure the impact.

Tips:

- Indicators are observable, measurable information that tell you about the quality or status of something.
- Multiple indicators are desirable, with a mixture of qualitative and quantitative data sources.
- The need for rigorous data collection must be balanced with feasibility and cost considerations.
- Common data sources:
  - ☐ Project advisors/partners
  - ☐ Students
  - ☐ Faculty
  - ☐ Business/industry rep's
  - ☐ Content-area experts
  - ☐ Participants
  - ☐ Institutional records/databases
  - ☐ State or national databases
  - ☐ Users
  - ☐ Website statistics
- Common data collection methods:
  - ☐ Surveys (in-person, phone, web-based, paper-and-pencil)
  - ☐ Interviews (structured, unstructured)
  - ☐ Focus groups
  - ☐ Observations
  - ☐ Performance assessments
  - ☐ Simulations
  - ☐ Testing

	What are the indicators of the impact?	How will these indicators be measured?	How will the data be collected and by whom?	When will you collect the data?
EXAMPLE	Students' demonstration of their facilitation, presentation, and writing abilities.	Rubric-based ratings of student performance (writing samples and video-recorded presentations and facilitation simulations) by trained raters. Student performance will be rated as "proficient," "acceptable," or "unsatisfactory."	Instructors will collect writing samples from students enrolled in the targeted courses. The project director will recruit nondepartmental faculty to serve as raters on the campuses where the courses are being piloted; the evaluators will train the raters to use the rubrics. The project director will work with department heads at the other two campuses to arrange for comparable data to be collected in comparable-level courses.	Second and next-to-last weeks of each course at campuses where the courses are being piloted. Next-to-last weeks of comparable-level courses on campuses where the new courses are not being offered (pretest data not collected to minimize burden on nonpilot campuses).