Making Evaluation Integral to Your ATE Proposal

presented by

Evaluate

Evaluation Resource Center for advanced technological education

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Introductions

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Moderator

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Presenter

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Weeks
Presenter

Linnea
Fletcher
Presenter

Karl
Kapp
Discussant

Gordon
Snyder
Discussant
Objectives

By the end of this webinar, you will be able to:

1. Locate and establish a working relationship with an evaluator
2. Sharpen the focus of your project’s evaluation
3. Identify the elements of a coherent and feasible evaluation plan
4. Present your evaluation plan as an integral part of your proposal
5. Connect with others interested in ATE evaluation

Handout

Available from resources.evalu-ate.org

Keyword search: integral
Working with an Evaluator

Peggie

Start Early

1. Identify
2. Involve
3. Build
Finding an Evaluator

- Established ATE projects/centers www.atecentral.net
- Graduate programs in evaluation
- University research centers
- University/college faculty

Evaluator Qualifications

General Qualifications
- Knowledgeable and experienced in qualitative and quantitative data collection methods
- Client-focused, responsive to context
- Effective communicator, facilitator, manager
- Identifies professionally as an evaluator
Evaluator Qualifications

ATE-Specific Qualifications
- Familiar with college environment and student population
- Knowledgeable about purpose and priorities of ATE
- Experienced in evaluating grant-funded projects
- Inquisitive about project

Internal - External Evaluation Continuum

Evaluator is a project staff person

Evaluator is completely independent from project

Internal & external evaluators conduct complementary aspects of the evaluation
Evaluator-Client Communications

- Ensures alignment between evaluation plans, project plans, and stakeholder values
- Improves understanding and utility of evaluation findings
- Increases accuracy of reports

Creating a Feedback Loop

- Meet quarterly with your evaluator
- Focus on reviewing and applying findings
- Schedule meetings well in advance—as part of the project management plan
Follow Evalua|t|e’s suggestions for finding an evaluator
Former PIs do not necessarily make good evaluators
Do not overpay
Involve your evaluator from the start
Name your evaluator in your proposal

Gordon Snyder
- Principal Investigator/Executive Director, Information & Communications Technology Center
- Recipient of $5M in NSF funds since 2003
- Evaluated 3 NSF projects

Karl Kapp
- Professor, Bloomsburg University
- Evaluator for 6 ATE grants
Focusing the Evaluation

Evaluation Purposes

- **Improvement (Formative Evaluation)**
  - Learn how the project could be improved as it is implemented
  - Share lessons learned
- **Accountability (Summative Evaluation)**
  - Document what you achieved with the grant money
  - Demonstrate the quality and impact of your achievements
Start with a Logic Model

- Visual, one-page, depiction of project
- Communication tool
- Road map to results

The Green Energy Technology (GET) Institute at Midwest Community College

**Inputs**
- NSF Funding
- Needs assessment
- Advisory panel
- ATE network

**Activities**
- Faculty workshops
- Follow-up support
- Guest lectures
- Field trips
- Campus-wide activities
- Dissemination

**Outputs**
- Trained faculty
- Modules
- Model curriculum

**Short-Term Outcomes**
- Increased student knowledge & skills in green tech
- Increased student interest in green tech careers
- Curriculum disseminated

**Mid-Term Outcomes**
- Graduates enter green tech careers
- Regional demands for green technicians are met
- Community colleges adopt curriculum

**Long-Term Outcomes**
- Increased regional economic vitality
- Enhanced national capacity for sustainable development
Define Evaluation Uses & Users

We need to show NSF and our partners that their investment was worthwhile.

Project Staff

Define Evaluation Uses & Users

We want to be certain we are producing high-quality deliverables.

Project Staff
Define Evaluation Uses & Users

We want to show our home institution that this a project area worth investing in.

Project Staff

We want to generate a body of evidence to show this type of intervention works.

Project Staff
Define Evaluation Uses & Users

We need to know what's working and what isn't so we can improve.

Evaluate Processes & Outcomes

Outcomes = What others get from what you do

Short-Term Outcomes
- Increased student knowledge & skills in green tech careers
- Increased student interest in green tech careers
- Curriculum disseminated

Mid-Term Outcomes
- Graduates enter green tech careers
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- Community colleges adopt curriculum

Long-Term Outcomes
- Increased regional economic vitality
- Enhanced national capacity for sustainable development
Evaluate Processes & Outcomes

Process = What you do

Content + Implementation + Outputs

Focus on What’s Important & Feasible to Evaluate

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A Program Officer’s Perspective

- Let the solicitation be your guide
- Collect data, publish it, and use it

Discussion

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An evaluation plan’s 4 basic elements:
1. Focus of the evaluation
2. Data collection plan
3. Analytical and interpretive procedures
4. Reporting schedule and projected uses

Checklists offer guidance in using general evaluation models/approaches

resources.evalu-ate.org

Keyword search on:
- Checklists
- Patton
- Stufflebeam
- Scriven

Evaluating student learning & outcomes

Gloria Rogers’ Assessment for Quality Assurance model & tools

© 2003 Gloria Rogers - Rose-Hulman Institute of Technology

www.abet.org
Evaluating professional development

Kirkpatrick Partners  
Kirkpatrick Four Levels Evaluation Model

Joellen Killion  
National Staff Development Council

Assessing Impact

Thomas Guskey  
Evaluating Professional Development

Data Collection

- What information do you need?
- How will you collect it?
- From whom?
- When?
Data Collection: Identify Indicators

For example...

- Content expert opinion
- Alignment with professional development standards
- Participant feedback (e.g., satisfaction, intent to use)
- Number reached
- Cost per participant

What data will inform you how the project is performing in these areas?
Data Collection: Define Methods, Sources, Timing

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Indicator</th>
<th>Measure/Method</th>
<th>Data Source</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty workshops</td>
<td>Expert assessment of content</td>
<td>Document review</td>
<td>Experts in green tech</td>
<td>Pre-implementation</td>
</tr>
<tr>
<td></td>
<td>Alignment with professional development standards</td>
<td>Workshop plan review</td>
<td>Evaluator</td>
<td>Pre-implementation</td>
</tr>
<tr>
<td>Participant feedback</td>
<td>Survey</td>
<td>All participants</td>
<td></td>
<td>End-of-workshop</td>
</tr>
<tr>
<td></td>
<td>Focus group</td>
<td>Sample of participants</td>
<td></td>
<td>6 months post-workshop</td>
</tr>
<tr>
<td>Number reached</td>
<td>Attendance counts</td>
<td>Project records</td>
<td></td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

Notes on Data Collection

- Build a body of evidence
  - Multiple data sources
  - Qualitative & quantitative data
- Embed data collection into regular project activities
- Use existing data whenever possible
- Use existing instruments when & if they match your needs
Notes on Data Collection

Locating instruments

- Online Evaluation Resource Library
  oerl.sri.com

- ATE Evaluation Community of Practice
  evalu-ate.org/community

Analysis & Interpretation

- How will you make sense of the data?
- What sort of comparisons will be made, if any?
- What counts as “success”?
Reporting & Use

- How and to whom will the evaluation results be reported?
- How will the project use the information?

A Program Officer’s Perspective

- Evaluation should be embedded in the project
- Know the difference between goals, objectives, and learning outcomes
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Lori

Describing the Evaluation In Your Proposal
Proposal Contents

- Project Summary
- Table of Contents
- Project Description
- References Cited
- Biographical Sketches
- Budget
- Current and Pending Support
- Facilities, Equipment & Other Resources
- Special Information & Supplementary Documentation
- Appendices

Source: National Science Foundation Grant Proposal Guide

Project Summary

- Intellectual merit
- Broader impacts
3 ATE-Specific Criteria About Evaluation:

- Is the evaluation plan clearly tied to the project outcomes?
- Is the evaluation likely to provide useful information to the project and others?
- Does the project provide for effective assessment of student learning?

To demonstrate the evaluation is tied to outcomes ...

- Clearly identify the focus of the evaluation
- Explain the linkage between your evaluation components
- Show that outcomes will be truly evaluated, not just described
To show how the evaluation will be useful...

- Explain how timely feedback will be used to inform decision making
- Describe how the results will be shared beyond the project
- Indicate why the results will be of value to others

To convey that student assessment will be effective...

- Define learning outcomes & criteria
- Specify assessment tools/procedures
1 ATE-Specific Criterion About Evaluation:
- Will the project evaluation inform others through the communication of results?

Communicate results to external audiences via
- Presentations & poster sessions
- Website
- Newsletter articles
- Press releases
- Journal articles
- Evaluation summit
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

DO:
- Create a subsection titled “Evaluation”
- Clearly specify the focus of the evaluation
- Summarize each aspect of the evaluation plan as concretely as possible
DON’T:
- Overpromise
- Use a lot of “evaluationese”
- Copy-and-paste a “cookie cutter” evaluation plan

Examples

...The evaluation will utilize an accepted mixed-methods design (Cook & Campbell, 1979). Quantitative and qualitative measures of performance will be used in both a formative and summative manner to gauge the merit and worth of the grant initiative. This mixed-methods approach has proven useful in utilizing both quantitative and qualitative performance indicators in a single research design (Frechtling & Sharp, 1997). It is also consistent with the best practices and recommendations for rigorous scientifically-based research....
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Examples

Project staff will administer an end-of-workshop survey to obtain participants’ feedback, including both rating and open-ended comments. The external evaluator will conduct interviews with participants six months following the workshop to determine the extent to which they applied the workshop content. She also will interview a random sample of students at the end of each semester to learn how their knowledge and perceptions of green energy technology were impacted.
Examples

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How?  

Who?  

When?  

Examples

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How? 

Who? 

When?

Biographical Sketches

Include a bio for your evaluator
- Qualifications
- Relevant experience
All projects and centers carry out evaluative activities. The funds to support an evaluator independent of the project or center must be requested.

—2010 ATE Program Solicitation

- ATE solicitation recommends ~10% of the total project cost for evaluation
- 8% is average among ATE grantees
Budget

Example

Total project costs $180,000
Evaluation budget @ 8% $14,400
Total direct costs $194,400
Indirect costs @ 25%* $48,600
Total budget $243,000

* Rates vary by institution

Putting it all Together

Include a section labeled “evaluation.” Specify the evaluation’s focus. Summarize plans for data collection, interpretation and analysis, and reporting and use.

Show how evaluation will enhance your project’s intellectual merit & extend impact.

Demonstrate you’ve allocated sufficient funds for the evaluation.

Describe your evaluator’s qualifications and relevant experience.
A Program Officer’s Perspective

- Not just a single paragraph at the end of the proposal
- Don't confuse the project evaluation with student or faculty evaluation

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Keyword search: integral
Upcoming Events

Webinar: September 15
Needs Assessment

Workshop: October 27
ATE Conference – Washington, DC
Designing Practical & Useful Evaluations

Webinar: November 17
Evaluation Basics

Register at www.evalu-ate.org/events

We Have $$$ for Your ATE Evaluator!

To attend the 2010 ATE PI Conference
- Up to $1,000 for expenses
- Must attend our preconference workshop with a project staff member
- Application deadline: August 15

Details at www.evalu-ate.org/events
Coffee Break Webinar Series
July 22: You + Graphic Design = Love/Money/Happiness

Annual Conference
November 10-13 in San Antonio, TX

Get more information/join at www.eval.org

Continue the Conversation
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evalu-ate.org/community
Thank You!

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