Evaluate is always looking for additional ways to help ATE projects and centers improve their evaluation endeavors.

We have recently added new materials to our Web site. Find these at www.eval-ate.org:

Our Web site has a new look! Like other ATE centers, we have incorporated a digital library to better help you locate relevant evaluation resources.

Did you miss our presentation at HI-TEC? Our session on thinking like an evaluator to enhance your next proposal generated a lot of follow up questions. Search “Demonstrating Value” in our digital resource library.

As always, if you have trouble locating a resource, let us know.

Call (269) 387-5895 and ask for Lori, Stephanie, or Arlen.

or

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Conduit editor: Stephanie Evergreen

Assessing Professional Development Impact

Evaluating the effectiveness of professional development puzzles even the most skilled evaluator.

The primary challenges cited frequently include these:

- Our goals focused on changing teachers’ content knowledge and/or attitudes about science.
- We don’t know how to link student achievement with professional development.
- It is impossible to link student achievement to professional development.

As a result, many evaluators settle all too often for the low-hanging fruit of evaluating whether program elements are completed as proposed and if participants found value in the program.

To address these problems, the National Staff Development Council published *Assessing Impact: Evaluating Staff Development*. Several key ideas emerged for us from this work, particularly how it is possible to link professional development to student achievement using a theory of change model. A prominent author on the subject, Carol Weiss, noted that change initiatives often lack clarity about how the steps of the program connect to produce the outcomes intended. It is the program’s components, the connections among them, and the assumptions upon which the program is designed that constitute a program’s theory of change. We can, therefore, model how professional development should impact student achievement and use evaluation to determine whether the model is accurate. The diagram below is a simple theory of change.

![Diagram showing the relationship between professional development on mathematics-specific pedagogy, implementation of the pedagogy in the classroom that changes student learning experiences, and student achievement increases.]

By examining the outcomes of each component, it is possible to support a claim that a relationship exists among the components of the theory of change. In this way professional development could be linked with changes in teacher practice and subsequent changes in student achievement.


Every discipline comes with its own jargon and terminology, and evaluation is no exception. But since most evaluation terms take the form of everyday language, it’s easy for evaluators and their clients to assume they’re talking about the same things, when that might not be the case.

Consider, for example, this jargon-laden sentence: “The evaluation will formatively and summatively assess the merit and worth of the evaluand’s process, outcomes, and impacts.”

Below we give definitions of these terms as they are commonly used by evaluators.

**Evaluand**: That which is being evaluated.

**Process**: Content, implementation, and outputs of an evaluand.

**Output**: Tangible result of a project’s activities (e.g., number of people served).

**Outcome**: Immediate change.

**Impact**: Long-term change.

**Formative evaluation**: Designed and used to improve a project.

**Summative evaluation**: Designed to present conclusions about merit or worth.

**Merit**: The intrinsic quality of an object. (How good is the project?)

**Worth**: The value of an object in relationship to a purpose. (How valuable is the project?)

Translation: Process, outcomes, and impacts, are aspects of a project that may be evaluated. For example, an evaluation of a professional development webinar for faculty might examine the effectiveness of marketing strategies or satisfaction of participants. These are aspects of process. The same evaluation could gather data on outputs, such as how many times webinar materials were downloaded. To assess impact, the evaluation could include follow-up with participants to discern if and how they used the content to improve student learning. The evaluation results could be used in a formative manner to make adjustments to the next round of webinar offerings or in a summative manner to report to NSF.

Conclusions about merit would be keyed to criteria that define quality in professional development. Conclusions about worth would hinge whether the webinar met a need in a cost-effective manner.

Good communication is critical. Evaluators need to understand the technical terminology associated with a program’s content area. Likewise, program personnel should make sure they understand evaluation lingo, even when—especially when—it’s disguised as everyday language.
Evalua|t|e is pleased to announce the addition of a new staff member: Peggie Weeks.

Many of you are probably familiar with Peggie. She has twice been a program officer at NSF, where she helped manage ATE and other under-graduate programs, and she is a regular proposal reviewer.

You may also have run into her on your own projects. She chairs the committees of two ATE centers—CREATE, out of the College of the Canyons in Santa Clarita, and the NSF Materials Science Resource Center, based at Edmonds Community College. Peggie also is the external evaluator for BioBench at St. Louis Community College and previously evaluated RoboRocks and TechXPloration, both at Middlesex County College.

In addition to her direct experience with ATE grantees, Peggie taught engineering and technology for 16 years at Corning Community College, NY. Prior to teaching, she was employed as a process engineer at Corning, Inc.

Peggie is leading Evalua|t|e’s effort to develop and facilitate an ATE evaluation community of practice. Please say hello to her at the PI Conference and let her know what would make evaluation more effective in your project or center. Stop by the staff page on our Web site to send Peggie an email and welcome her on board.

“...different stakeholders were included in the evaluation process and that the evaluation was responsive to program needs. The report clearly includes discussion of the connection between program values, evaluative questions, and the data that were collected to answer the questions.”

That comment was made by one of the 30 evaluators who reviewed a set of 10 ATE project and center evaluations between March and June. The review was part of our study to determine the evaluation needs of grantees within the ATE program.

On average, the evaluations received some of their highest ratings for using minimally disruptive data collection methods and integrating data collection into regular project operations. “The degree to which the evaluation became a part of the program's everyday functioning was notable,” remarked one reviewer.

The reviewers gave their lowest ratings in the area of evaluation impact, meaning they had concerns that the information delivered to clients may not have been especially useful—for project improvement purposes, for example. The raters’ comments suggest that the low ratings in this area could be due to the nature of the information produced by the evaluation and/or how the information was conveyed. “The evaluation was difficult to read,” explained one reviewer, “the format could have been adjusted to help the reader parse a report dense with tables and data.” Another said, “Limitations of the data used in the evaluation affected the overall quality of the evaluation and restricted the evaluators from making justified conclusions.” So, while practical, the evaluations were seen as having room for improvement in terms of their usefulness.

The reviewers used a rating system based on the Program Evaluation Standards to assess the evaluations. The Standards are based on the premise that evaluations should be useful, practical, ethical, and valid. Widely-used as a guide for evaluators, more details about the Standards can be found at www.wmich.edu/evalctr/jc
Assessing Impact
Thursday & Friday, February 4-5, 2010
Rio Salado Community College
Tempe, Arizona
Joellen Killion, Instructor

This two-day workshop provides guidance and practical resources for measuring professional development impact through an eight-step evaluation framework.

Why attend? Participants will:

- Identify the challenges associated with evaluating staff development.
- Create a theory of change for their staff development program.
- Develop an understanding of the evaluation process.
- Use the theory of change to design an evaluation framework for a staff development program.
- Examine resources to assist them in evaluating their staff development program.

Joellen Killion is the deputy executive director of the National Staff Development Council. She has been director of NSDC’s highly acclaimed NSDC Academy and its new Coaches Academy for school-based staff developers.

Her recent publications include the widely-used Assessing Impact: Evaluating Staff Development.

The regular cost of the workshop is $695, but NSF funding provides a discount for ATE-affiliated participants, reducing the cost to only $295 (Maricopa Community Colleges members pay $250).

Register for the workshop at the events section of our Web site: www.evalu-ate.org/events.

That is also where you can find location and accommodation information, including recommended hotels and ground transportation.