
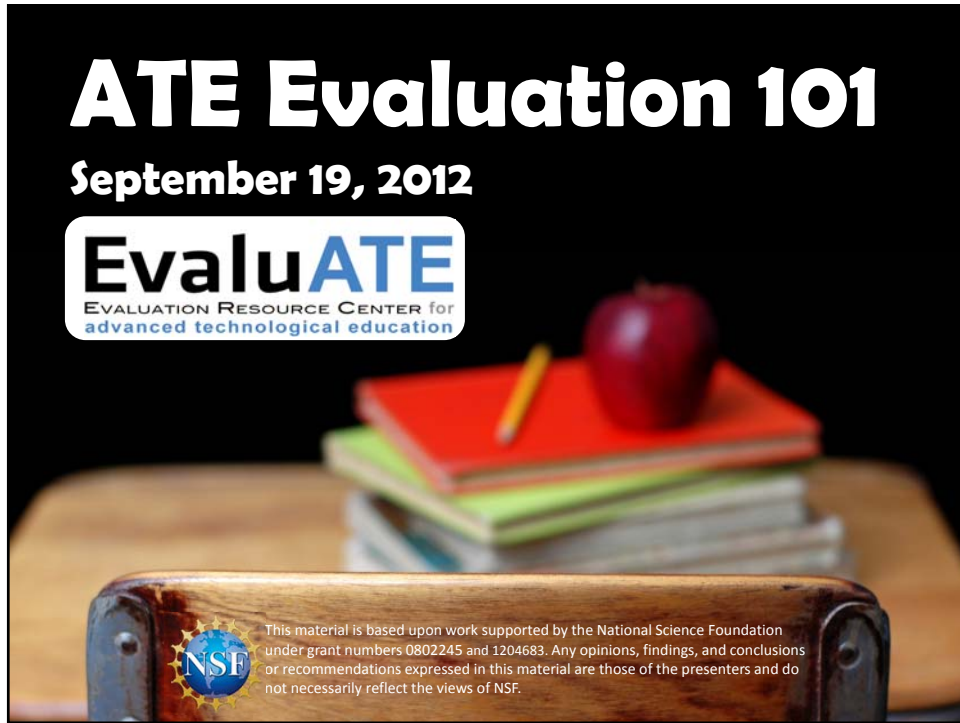




# ATE Evaluation 101

September 19, 2012





 This material is based upon work supported by the National Science Foundation under grant numbers 0802245 and 1204683. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the presenters and do not necessarily reflect the views of NSF.


## Introductions




**Jason  
Burkhardt**




**Lori  
Wingate**




**Elaine  
Craft**




**Melissa  
Miller**




Florence-Darlington  
Technical College




**WESTERN MICHIGAN  
UNIVERSITY**




**SOUTH CAROLINA  
ADVANCED  
TECHNOLOGICAL  
EDUCATION  
CENTER OF EXCELLENCE**



**MENTOR  
CONNECT**



**Laura  
Sanchez**



**MARICOPA  
COMMUNITY  
COLLEGES®**

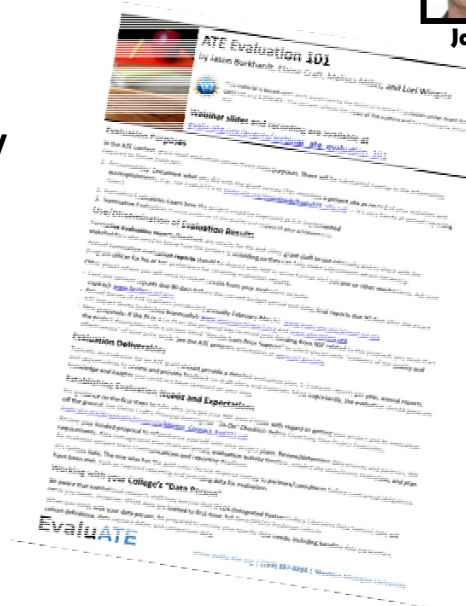
# Handout



Jason

Available from  
[www.evaluate.org/  
resources](http://www.evaluate.org/resources)

Keyword search:  
**101**



# Checklist



Jason

Available from  
[www.evaluate.org/  
resources](http://www.evaluate.org/resources)

Keyword search:  
**To do**



# Objectives



Jason

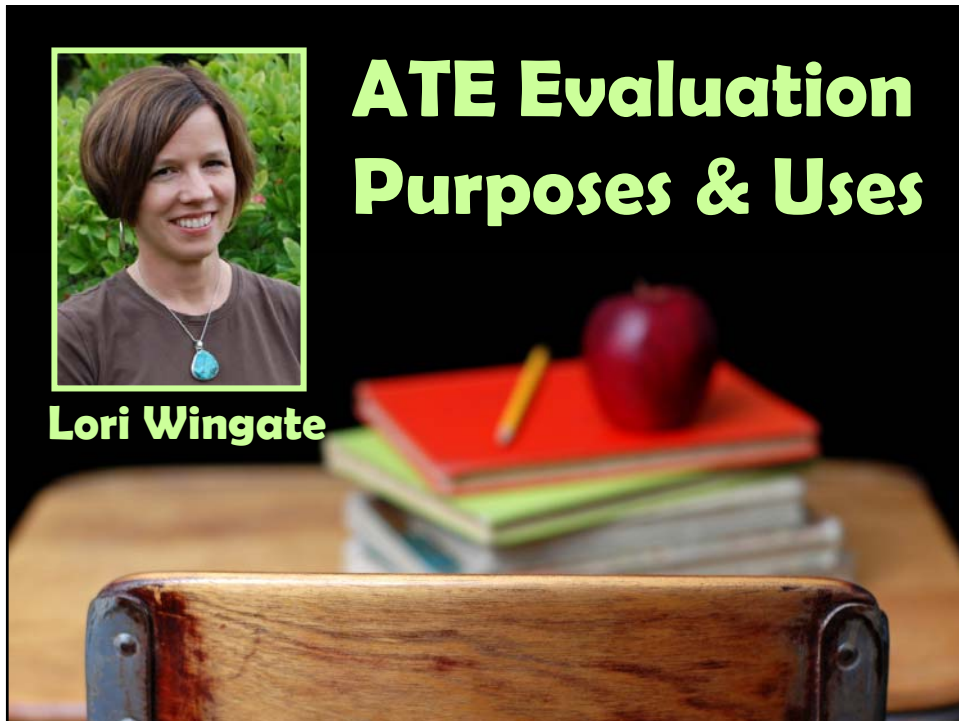
By the end of the webinar, you will

- understand the different purposes evaluation serves for ATE grants
- know when and where evaluation results should be reported
- be able to identify stakeholders at home and partner institutions who need to be involved in evaluation
- know what key decisions need to be made in consultation with the external evaluator at the start of a project
- be able to communicate needs for institutional data



Lori Wingate

# ATE Evaluation Purposes & Uses



**How do you think  
about evaluation?**



**Lori**


**How do you think  
about evaluation?**



**Lori**



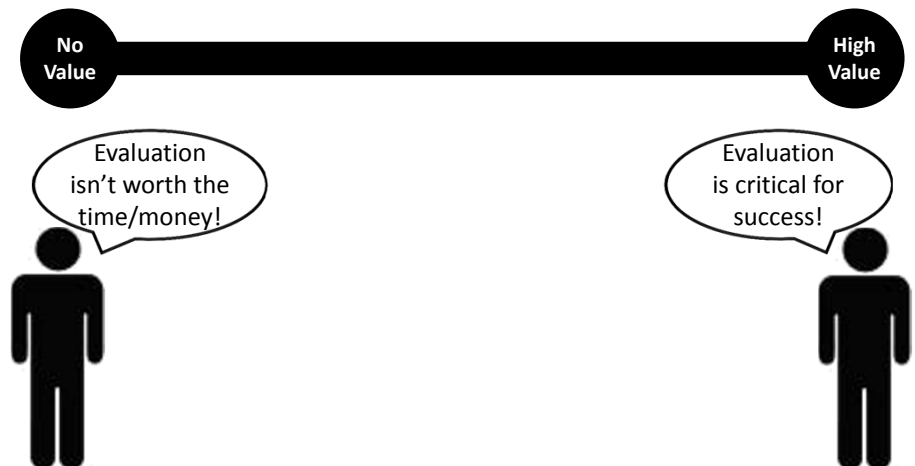
# How do you think about evaluation?



**Lori**

The image shows a black silhouette of a person climbing a set of black stairs. The word "Evaluation" is written in white on the side of the stairs. In the top right corner, there is a small square photo of a woman with short brown hair, smiling, with the name "Lori" written below it.

# How do you think about evaluation?



**Lori**

**No Value**      **High Value**

Evaluation isn't worth the time/money!

Evaluation is critical for success!

The diagram features a horizontal black line with two black circles at each end. The left circle contains the text "No Value" and the right circle contains "High Value". Below the left circle is a black silhouette of a person with a speech bubble containing the text "Evaluation isn't worth the time/money!". Below the right circle is another black silhouette of a person with a speech bubble containing the text "Evaluation is critical for success!". In the top right corner, there is a small square photo of a woman with short brown hair, smiling, with the name "Lori" written below it.

# Evaluation Purposes



Lori

## Formative Evaluation

Learn how the project could be improved as it is implemented

## Summative Evaluation

Provide evidence of the quality and impact of your achievements

## Accountability

Document what you did with the grant money

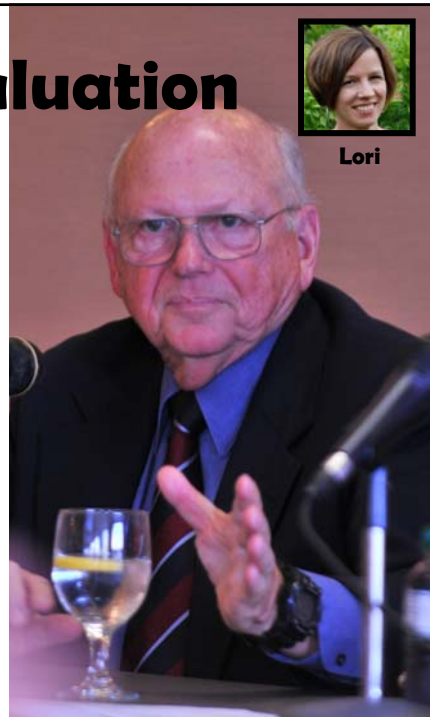
# Formative Evaluation



Lori

The most important purpose of evaluation is not to prove, but to *improve*.

—Daniel Stufflebeam



## Formative Evaluation

### Project staff...

- make time for evaluation
- are open to hearing negative findings
- use feedback to inform decision making



## Formative Evaluation

### Evaluator...

- takes time to learn about the project, its context, and stakeholders
- provides timely feedback
- guides project staff in understanding and using results



# Summative Evaluation



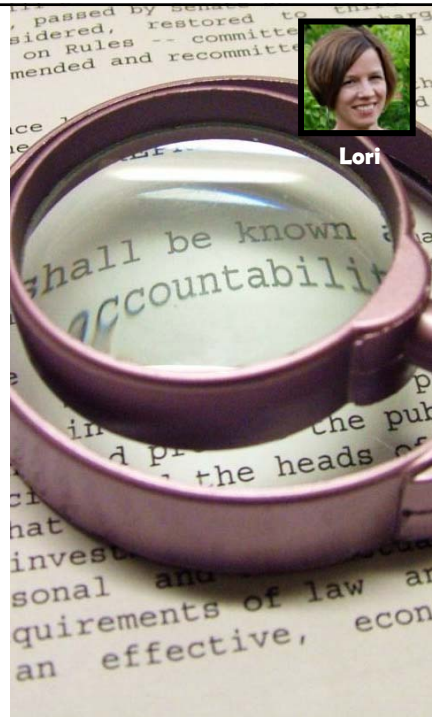
Lori

What is the project's quality?

What are the project's **impacts**?

- changes in knowledge, skills, abilities, attitudes, performance, practices, or policies
- show up at the individual, program, institution, organization, regional, or national level
- occur in the short term, long term, or in between

# Accountability



Lori

Document...

- What you did
- Who you reached
- Who you worked with
- What you produced (outputs)



# Accountability

Create a project vita

- Mission
- Goals
- Funding
- Activities
- Products
- Staff
- Students
- Contributors & collaborators
- Consultants



**Lori**



**Evaluate ATE Evaluation Resource Center**  
 Evaluation Center for Advanced Technological Education  
 Vite, 1 September 2012

evaluateate.org | (269) 387-5807 | Western Michigan University

**Mission**  
 EvaluateATE oversees the growth of the Advanced Technological Education (ATE) program by partnering with ATE projects and centers to strengthen the program's evaluation knowledge base, expand the use of exemplary evaluation practices, and support the continuous improvement of evaluation education throughout the nation.

**Goals**

- To educate ATE principal investigators and their evaluators about evaluation
- To increase dialogue within the ATE community around evaluation
- To collect and disseminate useful data/news about the ATE program to address knowledge about ATE, technical education and its evaluation

**Funding**  
 July 2008 - June 2012 (includes 4 grant sub-awards): \$2,400,415  
 August 2012 - July 2016: \$2,310,600


**Staffing**  
 2.6 FTE, not including contracted work

**Center Activities: July 2008 to September 2012**

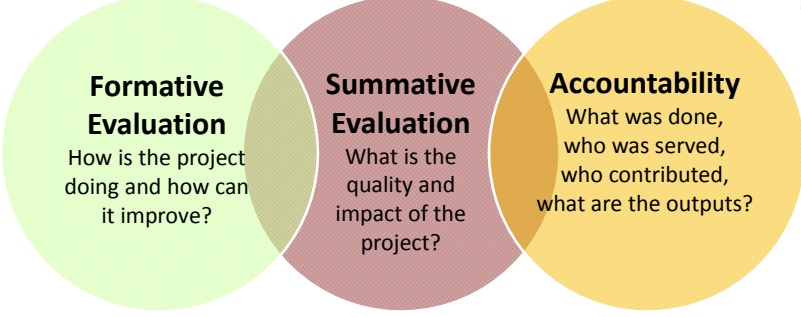
**Webinars (Contributors listed alphabetically)**  
 Burkhardt, J., Kraft, E., Miller, M., & Wittgrove, L. (2012, September). ATE Evaluation 101: Webinar presented to National Science Foundation Advanced Technological Education grantees and evaluators.  
 Billman, P., Burkhardt, J., Della-Penna, C., Jankowski, M., & Wittgrove, L. (2012, August). Build a Better ATE: Program presented to National Science Foundation grantees, principals, and evaluators.  
 Burkhardt, J., Miller, M., & Wittgrove, L. (2012, May). How to use the new website: webinar presented to ATE grantees and evaluators.  
 Burkhardt, J., Jankowski, M., & Rucka, E. (2012, March). Reducing the outcomes gap: A step-by-step approach to identify and address critical barriers to National Science Foundation Advanced Technological Education grantees and evaluators.

[www.evaluate-ate.org/about\\_us](http://www.evaluate-ate.org/about_us)

# Evaluation Purposes & Uses



**Lori**



**Formative Evaluation**  
 How is the project doing and how can it improve?

**Summative Evaluation**  
 What is the quality and impact of the project?

**Accountability**  
 What was done, who was served, who contributed, what are the outputs?

- Feedback to project staff and internal stakeholders
- Reflection and redirection
- Summative report to key stakeholders
- FastLane/annual report to NSF
- ATE Impacts book
- Annual ATE survey
- New proposals
- Promotion and dissemination

# Annual Reports to NSF



**Lori**


## Report Sections

- Participants
- Activities & findings
- Publications & products
- Contributions



[www.fastlane.nsf.gov](http://www.fastlane.nsf.gov)

# Annual Reports to NSF



**Lori**

See also: EvaluATE's summary of Fastlane report components

[evalu-ate.org/resources](http://evalu-ate.org/resources)

**Keyword: FastLane**

### National Science Foundation Annual Report Components

NSF grant PIs submit annual reports to NSF via the FastLane system at fastlane.nsf.gov. This document is a compilation of the FastLane annual reports system components. It identifies each component of the annual report and provides NSF's explanations concerning the "what" and "why" of each section. No modifications have been made to the original FastLane text, except for that which appears in [brackets]. This document was prepared by EvaluATE (NSF # 0802245) to assist ATE grantees in preparing their annual reports.

#### Project Participants

**1. What people have worked on your project?**

**What?**  
We ask PIs to provide basic information about each person who worked on the project - name, role on project, extent of time put in, and what the person has done on the project. [This information may be made publicly available.]

We then ask those in certain categories - from principal investigators to funded undergraduate assistants who worked many hours on the project and received compensation from the award - for a little more data about themselves. [This information will be held closely.]

**Why?**  
We ask for demographic data - relating to gender, ethnicity, race, disability, and citizenship, so that:

- We can gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category;
- We can ensure that those in under-represented groups have the same knowledge of and access to programs, meetings, vacancies, and other research and educational opportunities as everyone else; and
- We can assess involvement of international investigators or students in work we support.

Submission of demographic information is voluntary. You will suffer no adverse consequences if you fail to provide it, but we really need your information to help assure the statistical validity of our data. You can get more information about [www.nsf.gov](http://www.nsf.gov) at [www.nsf.gov/pubs/2005/2005\\_012.html](http://www.nsf.gov/pubs/2005/2005_012.html). Collection of this information is authorized by the NSF Act of 1950, as amended. You may also see our general [Privacy Statement](http://www.nsf.gov/pubs/2005/2005_012.html).

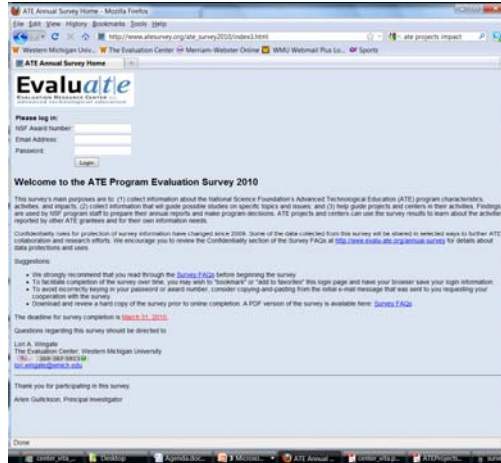
**2. What other organizations have been involved as partners?**

**What?**  
Here you let NSF know about partner organizations outside your own institution - academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or whatever - that have been involved with your project. Partner organizations may provide financial or in-kind support, supply facilities or equipment, collaborate in the research, exchange personnel, or otherwise contribute. The screens will lead you through the obvious possibilities, but will also give you an opportunity to identify out-of-the-ordinary partnership arrangements and to describe any arrangements in a little more detail.

# Annual ATE Survey



Lori



For example,

# of students and their demographic characteristics

# of professional development participants

# of materials developed

[www.evalu-ate.org/annual-survey](http://www.evalu-ate.org/annual-survey)

# ATE Projects/Centers Impact Book & Website



Lori

Student impact data

Workforce impact data



[www.atecenters.org](http://www.atecenters.org)

[www.ateprojectimpact.org](http://www.ateprojectimpact.org)

## Results of Prior NSF Support



Lori

“ The Project Description must begin with the subsection on Results of Prior Support.... This subsection must contain specific outcomes and results including metrics to demonstrate the impact of the activities undertaken including **evidence of the quality and effectiveness** of the project's deliverables. ”

—ATE Program Solicitation



What should we expect to receive from our evaluator?

– Participant in the 2010 ATE PI Conference Getting Started Workshop



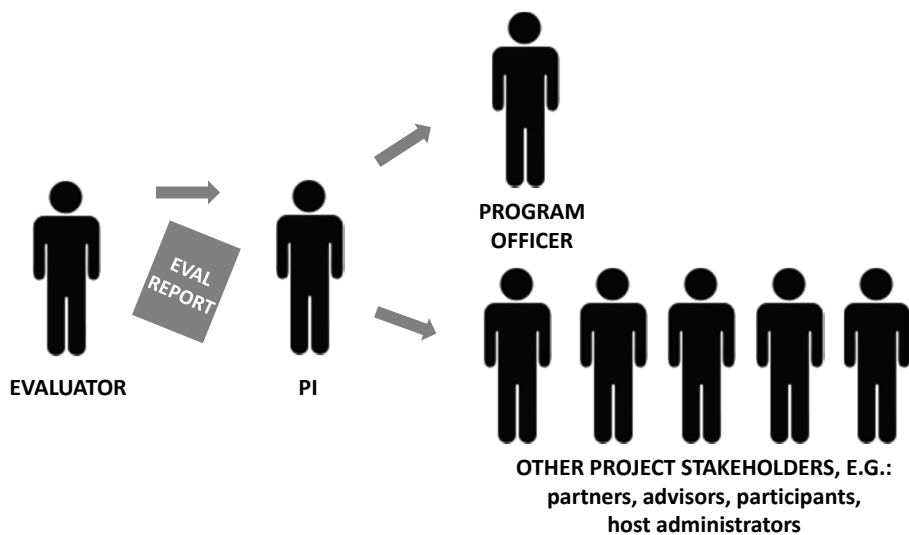
Lori

# Evaluation Deliverables


- Detailed evaluation plan
- Opportunities to review and provide feedback on draft plans and materials
- Interim reports
- Annual reports
- Knowledge and insights you could not have obtained on your own



# Reporting



# Reporting



Lori

Ask your program officer how he/she prefers the evaluation results to be conveyed.

Ways of reporting evaluation results to your program officer

Complete original report	Original executive summary	Evaluators' summary in annual report
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PI

PROGRAM OFFICER

# ASK!

The diagram illustrates the reporting process. On the left is a silhouette labeled 'PI'. On the right is a silhouette labeled 'PROGRAM OFFICER'. A large grey arrow points from the PI to the Program Officer, with the text 'Ways of reporting evaluation results to your program officer' written inside it. Below the arrow are three boxes containing the following text: 'Complete original report', 'Original executive summary', and 'Evaluators' summary in annual report'. The word 'ASK!' is written in large red letters at the bottom right.



Elaine Craft

# Communicating Evaluation Needs and Expectations



The slide features a black background. On the left is a portrait of Elaine Craft. To the right of the portrait is the title 'Communicating Evaluation Needs and Expectations' in large white text. The background image shows a wooden desk with a stack of books (red, green, and white covers), a red apple, and a yellow pencil. The back of a wooden chair is visible in the foreground.

## Award Letter Arrives – Now What?



Elaine



Alert the right people

Make a big announcement — mention NSF!

Process contracts with evaluation in mind (partners, evaluator, etc.)

## Establishing Expectations

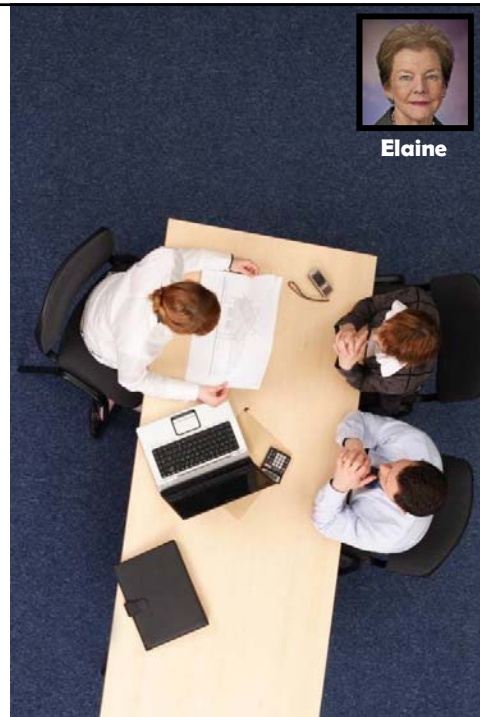


Elaine

Review proposal

Determine...

- Data sources, partners
- IRB considerations
- Data Management Plan (from proposal)
- Evaluation activity timeline
- Site visits/event evaluation
- Communications with project team



## Evaluator Help with Reporting

ATE Annual Survey  
Advisory Board(s)  
NSF Annual Report  
Your institution  
Partners/collaborators  
Newsletters/website



Elaine

## Data Plan



- Needs
- Definitions
- Timeline/deadlines
- Reporting dates



Elaine



## Measurable Goals



Elaine

- Determine or confirm metrics for success
- Use numbers, not just %
- Set benchmarks



## What and When?



Elaine

- Schedule annual evaluation activities
- Schedule in advance
- Alert evaluator of any changes



## Reports from Evaluator



Elaine

- Be specific about needs
- Be specific about and communicate dates
- Coordinate on timeline to
  - Reduce duplication of effort
  - Promote consistency
  - Prevent going crazy



## Golden Rule



Elaine

The one who has the gold rules!

- PI is responsible
- Be clear; be firm
- Future success depends on it
- Demonstrated outcomes and impact





## Getting the Data You Need



Melissa

### Student Database

- Captured data: optional versus required

### Integrated Postsecondary Education Data System (IPEDS)

- Limitations of first-time, full-time (FTFT) freshmen cohorts



## Planning & Mining

- Baseline data
- Your cohort
- Common definitions
- Snapshot dates



## Working Example

- Project Goal
- To increase the number of women and minorities who obtain an engineering credential.



## Working Example

Baseline data

- 3-5 years of graduates

Data elements

- student ID
- demographics
- program of study
- retention
- graduates

Snapshot dates

Comparisons



Melissa



## EvaluATE Events

**ATE Evaluation:  
Measuring Reaction,  
Learning, Behavior, and  
Results**

**ATE PI Pre-Conference Workshop**  
October 24 | 1-5 p.m.

**Webinar**  
November 28 | 1-2:30 p.m.

[www.evalu-ate.org/events](http://www.evalu-ate.org/events)



Jason



**www.evalu-ate.org**



**Digital Resource Library**

**Events**

**ATE Evaluator Directory**

**Newsletters**



**Jason**

