Strong Evaluation Plans = Stronger Proposals

July 20, 2011

Evaluate
EVALUATION RESOURCE CENTER for advanced technological education

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Introductions

Stephanie

Stephanie	Lori	Mike	Norena	Liz
Evergreen	Wingate	Lesiecki	Badway	Teles
Evaluate @ WMU		NETWORKS	San Francisco State University	Teles Consulting, LLC

Lara
Smith

MARICOPA COMMUNITY COLLEGES

Handout

Stephanie

Available from
www.evalu-ate.org/resources

Keyword search:
strong

Strong Evaluation Plans = Stronger Proposals

Evaluation Plans for ATE Proposals: Helpful Hints and Fatal Flaws

Sample Evaluation Products

Find an Evaluator

Data Management Plans

More on Proposal Development

Evaluate

Objectives

Stephanie

1. Meet the evaluation requirement of the proposal
2. Utilize evaluation to help meet the goals and objectives of the proposed project
3. Understand the data management plan – a new ATE proposal requirement
4. Create a stronger proposal

Evaluator Perspective

Norena Badway

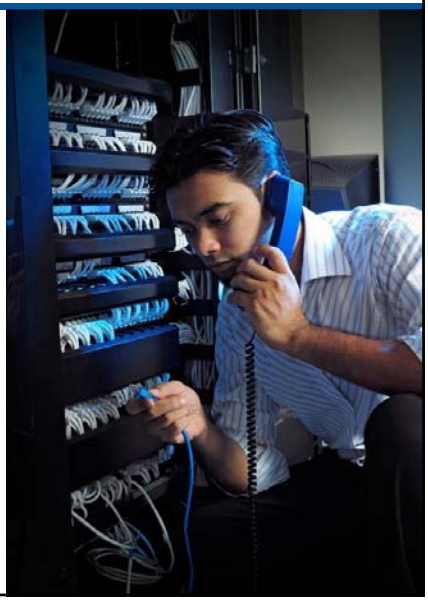
Why?

Norena

ATE requires it

> "the evaluative activities should provide evidence on the extent to which the project goals and objectives are realized"

- 2011 ATE Program Solicitation



Why?

Norena

ATE requires it

Mirror

Do you see what I see?

Why?

Norena

ATE requires it

Mirror

Legitimacy

Objective view

Why?

Norena

ATE requires it

Mirror

Legitimacy

Connections

Your activities with other perspectives

Why?

Norena

ATE requires it

Mirror

Legitimacy

Connections

Learning

Growth and development

Why?

Norena

ATE requires it

Mirror

Legitimacy

Connections

Learning

Dissemination

Sharing what you've learned

Who?

Norena

Evaluator

- With evaluation experience
- Applies evidence-based/research theoretic framework
- Seeks beyond "body counts"
- Analyzes, rather than audits
- Partners, rather than judges

What?

Norena

Assists in designing proposal?

or

Implements prescribed plan?

When?

Norena

Confer on goals &
Set data elements

Set course correction &
Confer on logic model

Propose Get funded Submit annual report

Feedback data analysis
Applies wide background of frameworks

Dissemination

Norena

Professional Development

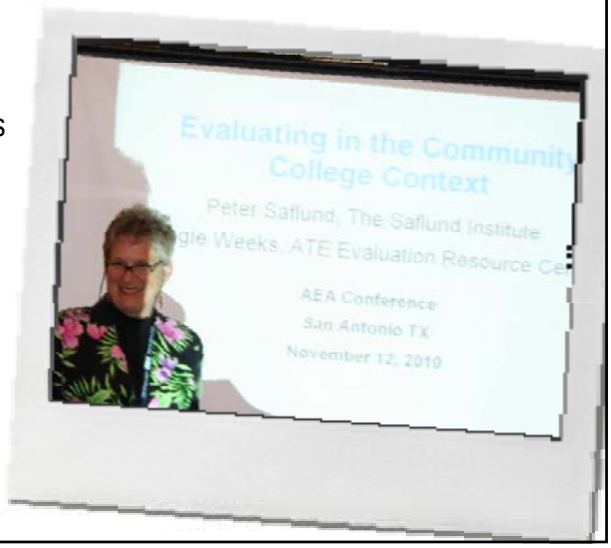
Project staff
Partners

Dissemination

Norena

Co-present

ATE PI Conference
Tech/Ed conferences



Dissemination

Norena

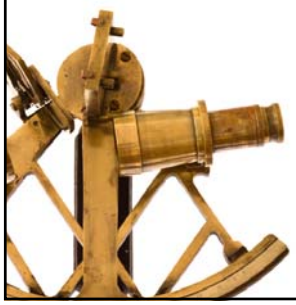
Publish

Promising Practices

Journals

PI Perspective

Mike Lesiecki



Takeaways

Mike

1. Methods to engage an evaluator and set expectations
2. Giving the reviewer enough of an evaluation section without impinging on page limits
3. Guidelines and strategies to generate a reasonable cost proposal and strong statement of work for the evaluation effort

Requirements

Mike

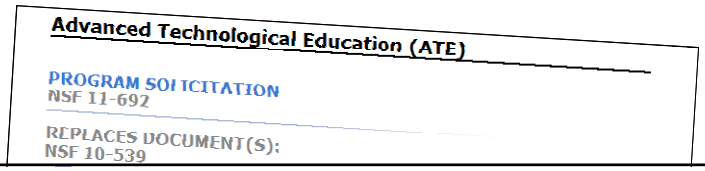
What are the evaluation requirements according to the solicitation?

And the review criteria?

Criteria

Mike

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


Advanced Technological Education (ATE)

PROGRAM SOLICITATION
NSF 11-692

REPLACES DOCUMENT(S):
NSF 10-539

What

Mike

… realities does the PI face at proposal stage?

Establishing the evaluator relationship

Time

Budget

Time

Where

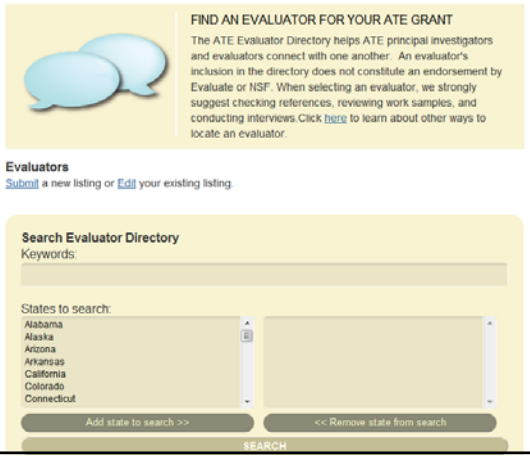
Mike

… does one find those evaluators anyway?

EvaluATE
Start with CV or bio

Work the network

Can be fraught with danger



How

Mike

… can an evaluation stand out for a reviewer?

- Looking for key words formative and summative
- Avoid generic
- Looking for direct ties to goals and objectives
- Looking for a plan

Utilizing attachments

Money & Getting It Done

Mike

- Accompanies contract
- Defines activities and deliverables
- Allows evaluator to invoice
- Allows project to pay

Statement of Work

The evaluator will deliver:

1. A data acquisition and evaluation plan with timelines.
2. An interim report twice per year
3. An annual report due by March 19
4. A series of benchmarks for valid impact metrics.

Above deliverables will be contracted for $$,$$$

Cost Proposal

Mike

Start with SOW

Fixed or Hourly?

Site visits & travel?

Number of reports?

Total cost of evaluation

Budget Example

Mike

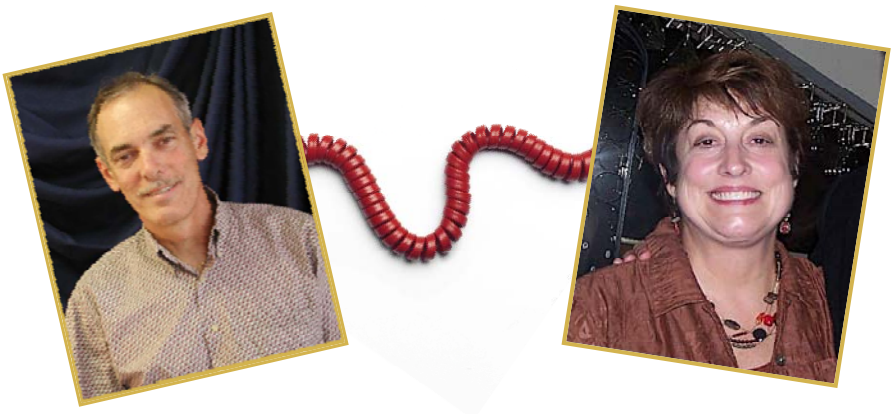
Project budget

$900,000
÷ 3
$300,000 per year

Evaluation expenses

$50,000 fixed fee
+ $9,965 expenses
$59,965

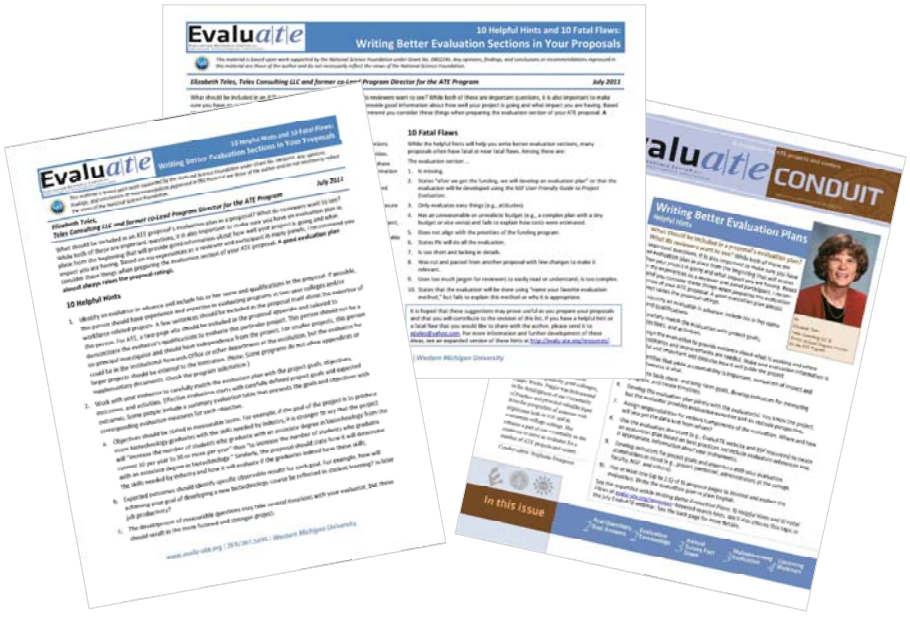
6.7%



It starts with a telephone call…

Helpful Hints & Fatal Flaws

Liz Teles



You have a great idea!

but
you need the money!

First!

Liz

A good evaluation plan almost always raises reviewer ratings of your proposal.

It improves your project.
It makes it easier to manage.
It increases quality.

Helpful Hints

Liz

1. Identify an evaluator in advance.
2. Match evaluation with goals, objectives, and activities.
3. Design to provide evidence about what is and isn't working.
4. Remember that while accountability is important, evaluation of impact and effectiveness is vital.
5. Evaluate short and long-term goals, develop indicators to measure progress and include timelines.

Professional Development Example

Liz

Accountability

Did you do it?

How many attended?

Were participants from the schools, colleges, and industries you hoped to serve?

What was their gender and ethnicity?

Impact & Effectiveness

Did it make a difference?

Did participants learn?

Did they use the information in their classes or work?

Was it appropriate for future technicians?

Did employers value the new skills that graduates have?

Helpful Hints

Liz

6. Develop the plan jointly between evaluator and PI.
7. Assign responsibilities for various components.
8. Use the evaluation literature.
9. Keep in mind your evaluation stakeholders.
10. Use at least 1 (up to 2.5) pages.

Assign

Liz

Who?	How?	When?
PI/PD	Direct Contact	Once a month
Partners	Web Forms	End of semester
Institutional Research Office	Graduation & Matriculation	Each July
Evaluator	Focus groups Surveys Calls to industry	Just after end of semester

Fatal Flaws

Liz

The evaluation plan

1. Is missing.
2. States "after we get funding, we will develop a plan."
3. Only evaluates easy things.
4. Has an unreasonable or unrealistic budget.
5. Does not align with priorities of funding program.

Evaluation Budgets

Liz

- ✓ Be reasonable
- ✓ Be realistic
- ✓ Match project and evaluation complexity
- ✓ Discuss what dollars buy

$800/day
x
20 days

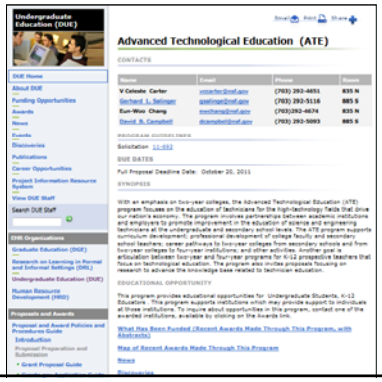
4 – Planning
3 – Data collection
2 – Analysis
5 – Report writing
2 – Dissemination
4 – Ongoing meetings

Align with program priorities

Liz

Does the project have potential to improve **student learning** in **science and technician engineering programs** in **community colleges**?

Read the program solicitation!!!



Align with program priorities

Liz

Fatal Flaws

Liz

The evaluation section

6. Was cut and pasted from another proposal without adaptation.
7. States PIs will do all the evaluation.
8. Is too short and lacking in details.
9. Uses too much jargon.
10. Does not explain methods used.

Use Literature

Liz

What is it?

Why was it chosen?

Why is it appropriate?

Have instruments been pilot tested? Validated?

Data Management Plan

Lori Wingate

It's mandatory

Lori

> "Fastlane will not permit submission of a proposal that is missing a Data Management Plan."

—NSF *Grant Proposal Guide p. iv*

FastLane www.fastlane.nsf.gov

It's policy-in-action

Lori

"Investigators are expected to share with other researchers … the primary data, samples, physical collections and other supporting materials related to or gathered in the course of work under NSF grants."

—NSF *Award and Administration Guide, Chapter VI*

It's brief

Lori

Data Management Plan

1. Types of Data

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2. Standards for Data and Metadata Format and Content

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3. Policies for Access and Sharing

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4. Provisions for privacy, confidentiality, security, intellectual property

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5. Policies and Provisions for Re-use, Redistribution, and the Production of Derivatives

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6. Plans for Archiving and Preserving Access

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2

It's not just compliance

Lori

Helps with

- Project management, policies, procedures
- Clarifying evaluation data to be collected
- Disseminating project results

DMP example from

Mike Lesiecki

MARICOPA COMMUNITY COLLEGES

DATA MANAGEMENT PLAN

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2. **Data Format.** Data will be largely available in accessible formats such as Word and Excel documents, jpeg and pdf files, and video files. All data will be maintained in a format that is easily accessible to all interested parties. Interested parties will include faculty and students at other institutions and educational and scientific researchers.
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Any issues relating to data management that are not directly addressed in the foregoing sections will be handled in accordance with NSF policies and procedures along with any other applicable content area policies and all state and federal statutes governing intellectual property matters.

- Lab exercises
- Results of student experiments
- Project evaluation results

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- Word
- Excel
- PDF
- Jpeg
- Video

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- Open source via web
- Provided upon request
- Published data will be made available in accordance with journal specifications

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- Open source
- Shared freely
- Consult with legal counsel re: intellectual property issues

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- Users must cite originating institution

DATA MANAGEMENT PLAN

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   Any issues relating to data management that are not directly addressed in the foregoing sections will be handled in accordance with NSF policies and procedures along with any other applicable content area policies and all state and federal statutes governing intellectual property matters.

- Stored digitally and in hard copy
- Data formats updated as necessary

DATA MANAGEMENT PLAN

1. **Expected Data.** We expect to generate the following data in the course of this project:
   a. Laboratory exercises and descriptions of newly developed activities
   b. Results of student experiments, including written materials and spectroscopic data
   c. Results of project evaluation; data collected by evaluator to include formative and summative assessments
2. **Data Format.** Data will be largely available in accessible formats such as Word and Excel documents, jpeg and pdf files, and video files. All data will be maintained in a format that is easily accessible to all interested parties. Interested parties will include faculty and students at other institutions and educational and scientific researchers.
3. **Access to Data.** All laboratory exercises and activity descriptions, and the work product resulting there from, will be open source materials available either on our website or on request from interested parties. Any published data, whether in educational or scientific journals, will be accompanied by the requisite supplementary/supporting materials provided in the format designated by the publishing journal.
4. **Data Sharing.** We anticipate that the vast majority of the materials produced in this project will be treated as open source and shared freely with interested parties. In the event that a situation arises requiring protection of intellectual property, we will rely on legal counsel for the Maricopa County Community College District, in accordance with any applicable NSF guidelines for the handling of such matters.
5. **Policies for Re-Use and Redistribution.** Materials will be open source, with the condition that the originating institution be cited in the re-use of the materials. See disclaimer regarding intellectual property in #3 above.
6. **Archiving of Data.** All materials will be stored digitally in at least two separate locations (servers) as well as in hard copy. Both digital and hard copy materials will be organized in a manner yet to be determined. We anticipate retaining data indefinitely. Physical samples of materials generated by the project will be stored in our stockroom which has adequate protection against fire and water hazards. While we cannot presently anticipate what changes could occur to technological standards or practices, we are reasonably confident that we will be able to update data formats as the need arises.

   Any issues relating to data management that are not directly addressed in the foregoing sections will be handled in accordance with NSF policies and procedures along with any other applicable content area policies and all state and federal statutes governing intellectual property matters.

DMP example from

Rachael Bower

ATE CENTRAL

ATE Central Data Management Plan

This plan describes how data, materials, and resources created by ATE Central will be managed and shared with the ATE community and other interested parties. The coordination, documentation, and implementation of this plan helps to ensure that ATE Central benefits not only ATE grantees, but the greater National Science Foundation community and the general public through free and open access to the innovative technical educational programs and materials created by the ATE community.

Data Description

The table below details the types of data and metadata generated by ATE Central.

Data Type	Description of Data	Metadata
Metadata	*Educational resources* - Database of information that describes and points to educational resources created by ATE centers and projects and/or stored and archived by ATE Central. Center and project information - Database of information that describes the individual ATE projects and centers.	Qualified Dublin Core with additional fields specific to the ATE community and supporting ATE Central workflow.
Materials and Publications	*ATE Community Archive* – Deliverables and metadata from ATE projects and centers, hosted online by ATE Central in MS Word or PDF formats. *ATE Events* – Web-based description of upcoming events with past events archive. *ATE Central Connection* – Email and web-based newsletter supporting ATE community. *ATE Central Handbook* – PDF document supporting project development for ATE grantees.	Title, author, date, and format metadata embedded in MS Word, HTML, and PDF files. Archived materials will be described in Qualified Dublin Core with additional fields specific to the ATE community and the supporting ATE Central workflow.
Evaluation Data	*Annual Reports* – PDF reports submitted annually via FastLane. *Survey Data* – PDF compilations of intercept and general web survey data from ATE PIs.	Title, author, date, and format metadata embedded in PDF files.

Data Management Plan ATE CENTRAL

DMP example from

Rachael Bower

ATE CENTRAL

Data Standards

The metadata produced by ATE Central will be based on Dublin Core (http://dublincore.org), an authoritative and interoperable metadata standard used worldwide. This metadata will be available for harvesting via the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH - http://openarchives.org/pmh/). All data created by the project will be stored locally on servers owned and maintained by Internet Scout.

Data Access and Sharing

All metadata produced by ATE Central is freely available. Interested parties can harvest metadata via OAI-PMH or contact the project for alternative formats such at tab-delimited or Excel files. Outreach materials and publications will also be freely available via the ATE Central website or by contacting the ATE Central Outreach Coordinator. Additionally, ATE Central will share with any interested person documentation of the processes and procedures used to build the project. Since this data is freely available to anyone, derivatives are encouraged.

Privacy

While usage statistics are gathered from the ATE Central site, the information is compiled in aggregate and personally-identifiable data will never be passed along to any third party. All information entered into the site for registration is confidential.

Intellectual Property

The ATE Central metadata repository points only to websites and other materials that are already freely available online. However, requests from content owners who wish to have metadata leading to their materials removed from ATE Central will be honored in a timely manner. If ATE Central hosts any materials created by another ATE center or project for the purpose of preservation, the original owner will retain copyright.

Archiving and Preservation

All metadata and publications created by ATE Central will be kept alive on the project's servers and online after the duration of the project. ATE Central will work with ATE Central Advisory Board, NSF, and the ATE community to identify additional viable preservation paths, for both data created or maintained by ATE Central and deliverables and data from the ATE community as a whole.

Data Management Plan ATE CENTRAL

There's help

Lori

ATE CENTRAL HANDBOOK

atecentral.net
University of Wisconsin

DMPonline
The DCC Data Management Planning Tool

dmponline.dcc.ac.uk
UK Digital Curation Center

ICPSR A PARTNER IN SOCIAL SCIENCE RESEARCH | INTER-UNIVERSITY CONSORTIUM FOR POLITICAL AND SOCIAL RESEARCH

icpsr.umich.edu
University of Michigan

DMP online

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Language from NSF policy

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Lori

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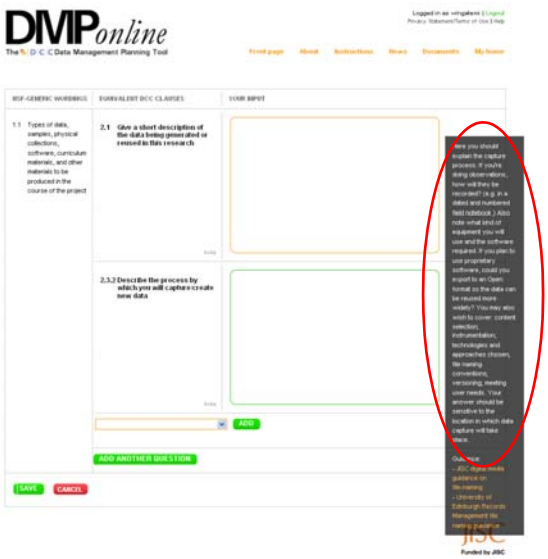


DMP online

Lori

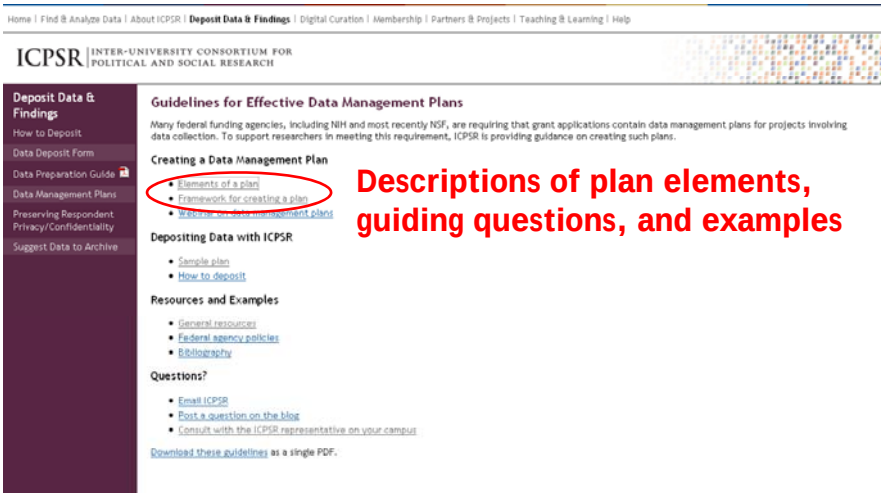
DMP online

Lori

Export as a TXT file for more control over formatting and length

ICPSR

Lori



Descriptions of plan elements, guiding questions, and examples

Putting it all together

Lori

- ✓ Project Summary
- ✓ 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*

Past Attractions

Stephanie

June 9, 2011 NETWORKS
Grant Opportunities and Success Strategies

July 21, 2010
Making Evaluation Integral to your ATE Proposal

Coming Attractions

Stephanie

September 21
Ready, Set, Evaluate!

November 16
e-valuation: Assessing Webinars, Social Media, and Website Usage

Register at
www.evalu-ate.org/events

ATE PI Conference

Stephanie

Evaluator Support Funds!
Up to $1,000 for
- Lodging
- Travel
- Registration

Applications due August 15

Get more information at
www.evalu-ate.org/events

AEA

Stephanie

Coffee Break Webinar Series
July 28
What's in the Cultural Competence Toolbox?

Annual Conference
October 31-November 5 in Anaheim

AMERICAN EVALUATION ASSOCIATION

Get more information/join at *www.eval.org*

www.evalu-ate.org

Stephanie

ATE Evaluation Listserv

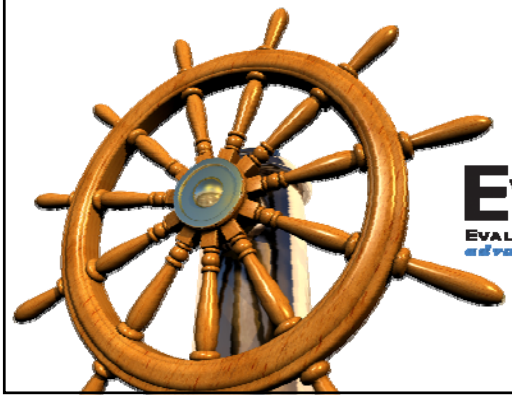
Conduit Newsletters

ATE Evaluator Directory

Digital Resource Library

Events

Thank You



Evaluate
Evaluation Resource Center for advanced technological education