Proposal Preparation and Evaluation Support for Current & Prospective NSF ATE Applicants

July 9, 2009

Webinar Procedures

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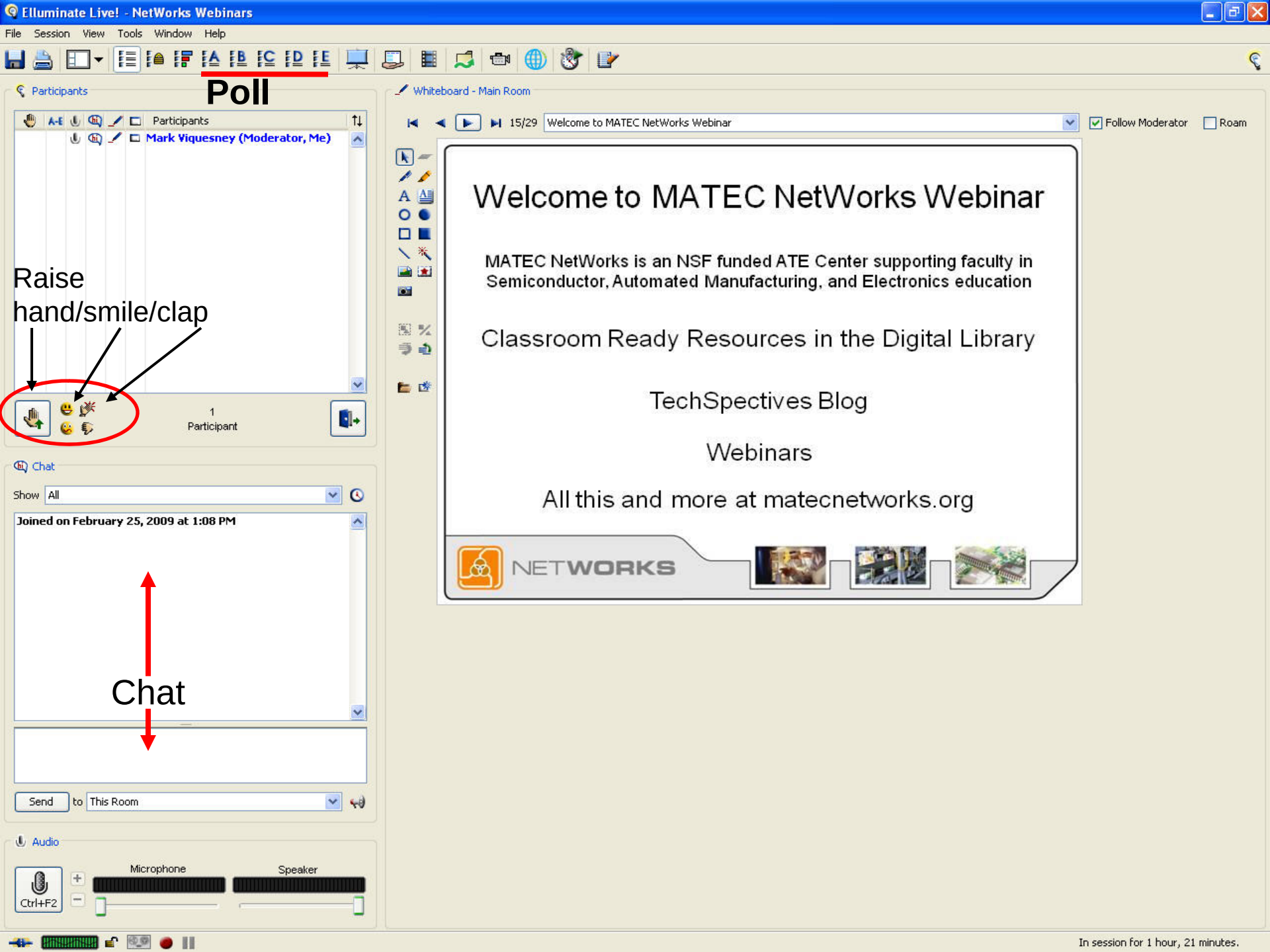
- If you have questions during the presentation, please submit them in the Chat Window.
- At the end of the session we will answer as many questions as we can. Please type your questions in the Chat Window.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In session for 1 hour, 21 minutes.

Welcome

Presenter—TSI

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Executive
Director

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Webinar and
Resource Library
Manager

MATEC

Organization

- Day 1 will focus on
  - Writing for success
  - Intellectual merit & broader impacts
  - Partnership and support
- Day 2 will focus on
  - Goals – SMART goals
  - Impact and measurement of impact
  - Evaluation standards
  - Evaluating for success

Additional Goals for this Webinar

- Evaluation for meaning
  - Use the Evaluation Standards
  - Learn how evaluation can strengthen a proposal
  - Learn how evaluation tools and practices can help you understand & manage your project

Disclaimer

- Views expressed herein are those of the presenters and do not express the opinions of NSF.
- The presenters cannot foresee every situation, and proposal preparation and submittal always involves an element of risk – decisions regarding how, or whether to rely on this material, is solely the responsibility of the user.
- The purpose of this Webinar is to help develop an appreciation of the role of evaluative perspectives in preparing proposals. Attending this Webinar creates no specific entitlements for the attendees.

General proposal Issues:

What kinds of things can lead to a failure to get funded?

Unclear Goals

- Goals that are not written in a clear and measurable way
- Outcomes are unspecific with regard to impact on targeted groups or subjects
- Goals that are not realistic in terms of time, budget, or human resources

Unclear Impact

Basic Impact Measures

- Who (target audience)
- How many
- How will they benefit (and how will you know)
- How are they better off than before

Rudimentary Dissemination

Can you do more than

- Go to educator conferences
- Set up a website
- Passively make your materials available

Evaluation Perspective

- Need to answer questions with more than a “YES” or a “NO”.
  - Dissemination goal: Set up Website
  - Evaluation question: Was Website set up?
- Is this all we want to know?

Lack of Qualification and Support

- There is no statement showing why the proposers are qualified to do the work
- The proposal is not differentiated from similar work either in process or outcomes already achieved by others
- Support letters to are generic do not show clear evidence of supporter’s role as a stakeholder

Evaluation

- Evaluation plan lacks detail
- Evaluation plan is not tied to goals and outcomes

Evaluation

- Evaluation product concerned only with accomplishments and not with impact
- Claims implicit in goals are not proven

(We'll talk more about claims a bit later, but for now, keep claims in the back of your mind as we discuss further)

But …. You can do all this right and still possibly not get funded. We're talking here about improving your chances, not guaranteeing the future…..

A bit about how proposals are reviewed……

Before starting a proposal, remember the review panel, understand that you have three great opportunities to get your points across to them…….

1. The project summary
2. The project narrative
3. The description of the evaluation

As you prepare the proposal, try to answer the

FIVE CRITICAL QUESTIONS

These questions underlie the whole proposal but should all be answered in the one-page project summary.

1. What is the Intellectual Merit of the Proposed Activity

What are some of the aspects of intellectual merit?

Intellectual Merit

- Originality and Creativity

Intellectual Merit

- Potential to advance knowledge & understanding

Intellectual Merit

- Transformative nature of the work
  (what and who will change because you do this)

Recapping Some Basic Intellectual Merit Review Criteria

- What makes this work original, and therefore gives the proposal value?
- Why is it interesting and creative? Why should NSF fund it?
- Is there support in research literature for why this is worthy?
- Is the concept innovative? New Twists?
- Does it advance teaching and learning?
- Who is the ‘target’ customer?
- Why are *you* the one to be doing this?

2. What are the broader impacts of the proposed activity?

Broader questions of

- Who (target population or treatment group)
- How is the treatment group identified and why
- How many (numbers)
- Characteristics (place, capacity, need)
- What will be different and better as a result

Different Aspects of Impact

What are some ways to discuss broader impacts?

A. Faculty development and improvement
B. Institutional capacity or transformation
C. Target population - Improvement
D. Proximal extensibility
E. Distal extensibility

Other Impacts

- Broadening participation and access
  - For whom
  - For what benefit

Some Specifics: Participation & Access

- New venues
- New infrastructures
- New methods
- New learner populations
- New educational partners

Recapping Some Broader Impact Review Criteria

- What is the impact on targeted population?
  - What will be better for students and teachers as a result of doing this work?
- How will the grant recipients be transformed by the activity?
  - What will change in the institution because you did this work?
- Original contributions to the field of technician education?
- What will this proposal do to extend the work beyond the grant recipients?

3. Who are the Partners and Stakeholders? Why are they there?

- How do they relate to and support the broader ATE goals?
- How do they relate to and support your project goals?

Possible Broader ATE Goals

(ATE enabling legislation and program announcements)

- Economic viability and competitiveness
- Maintaining an adequate supply of qualified technical workers, etc.
- Reducing dependency on foreign resources
- Educational and workforce diversity and representation in STEM fields

Partners and Stakeholders

- Who is truly committed, and who is merely involved?

  (Who has “skin in the game?”)

Partners and Stakeholders

- In your own institution: Skin from
  - Faculty?
  - Administration?
  - Trustees?
  - Institutional research / advancement

Partners and Stakeholders

- Business and Industry, selected individuals and aligned associations
- Applicable certifying bodies
- *Particularly employers*

Partners and Stakeholders

- Policy Makers, Economic Development Councils, Chambers of Commerce, local Business Roundtables
- Relevant State, local or Federal agencies

4. How will the proposed work be sustained?

- What constitutes “sustainability”?
- How do you know when you have it?

Proposed work be sustained?

- Can what you do be integrated into or aligned with the institution's mission?
- Will ,methods, materials, infrastructure or facilities remain?
- Will the institution be transformed in some way?

Proposed work be sustained?

- Will beneficial & enduring relationships be developed?
- Will these relationships allow work started with the grant to continue without additional Federal support?
- Would any expected outcomes provide the basis for future grants?

5. Why Should the NSF Fund It?

- Will the work advanced the mission of ATE?
- Will the project likely be effective in treating the targeted population? (GPRA)

  (Note: Your evaluation plan can help show your attention to these questions)

Why?

- How will the project evaluation show and measure impacts and outcomes that reasonably appear to justify the Federal funds requested?

Why?

- Does evaluation describe and measure all relevant aspects?

Why?

- Activities: Development / adoption /adaptation

  (Answers “What?”)

Why?

- Measurable outcomes: Treatment of targeted populations, changes in instructional practice etc.

  (Answers How Many? How Often?)

- Impacts: What changed (hopefully improved) as a result?
- Greater acceptance or adoption of materials and or practices?
- Adaptation by other departments or schools?
- Institutional transformation?

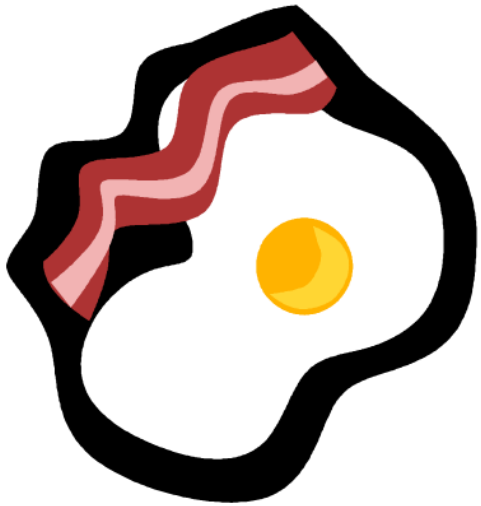
(Answers “So What?”)

Time to Catch Our Breath

Answer Questions

Intellectual Merit
&
Broader Impacts

Goes together like …….



The following two samples may serve to integrate the ideas we've discussed in Part 1. We invite you to look at each and offer any comments… we'll look first at the sample intellectual merit statement ---

Sample Intellectual Merit Statement

Intellectual Merit: According to the Center for Dropout Studies at Hilton University {*not a real place*} over half (58%) of enrolled students do not complete the first semester engineering technology curriculum in community colleges. A substantial body of prior ATE funded work[1] convincingly shows that industry relevant scenario based instruction improves engagement and reduces dropout rates for technology students in a broad range of disciplines.[2] The requested funds will allow us to localize and test industry relevant scenarios originally developed by the Scenario Education Center at Knob Hill Community College (ATE DUE 0123456) for their affect on retention of first semester engineering technology students in our service area. By providing faculty the necessary training and release time, this project will allow us to modify the first semester engineering curriculum using innovative teams of industry and faculty, so it will become more industry relevant and scenario based.

Sample Broader Impact Statement

Broader Impacts: The proposed project will support development of faculty mentors within our institution who will help our faculty convert the entire program to scenario based instruction by the end of Year 1. Based on this outcome, we will extend our workshops and mentoring activities during Year 2 to assist the three other colleges within out district. By year 3, Models and practices as well as mentorship capacity developed as a result of this project will provide the basis for the State Board for Community Colleges to offer scenario based course development workshops as part of its state funded instructional and program reform initiatives for engineering technology programs statewide.

Wrapping it up

www.evalu-ate.org

Evalua|t|e Next Events

Demonstrating Value for Technology Programs – Session B3

Tuesday, July 21, 3:30 PM – 5:00 PM

HI-TEC Conference, Scottsdale

www.highimpact-tec.org

Developing Evidenced-based Assessment Processes: Keep it Simple – with Gloria Rogers

Tuesday, October 20

TIME Center, Baltimore

www.evalu-ate.org

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http://www.hostedsurvey.com/takesurvey.asp?c=Proposal

Thank You For attending Day 1

We will see you here again tomorrow.