Evaluation: Information for Grant Writers

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UTEP Center for Institutional Evaluation, Research and Planning (CIERP)
Objectives

- Knowledge of CIERP’s roles at UTEP
- Awareness by grant writers of evaluation requirements from federal agencies and foundations
- Increased knowledge about evaluation requirements that will allow grant writers to submit a grant proposal with a strong evaluation plan
CIERP’s Roles

Institutional Research
Example: explaining student success

Evaluation
Impact of Support Programs

Planning
Integration of insights and knowledge into Institutional, Department, and Course plans

Policy Analysis
Help shape principles that guide State and institutional policies

Data Retrieval, Storage and Distribution
Interactive Fact Book

http://cierp.utep.edu
Information about Students’ Majors
### Graduate Majors by Gender and Ethnicity

**Term**: Fall 2009

#### Definition:

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Data Requests

cierp@utep.edu

Expect a response from Cathe Lester, Ph.D. or another member of CIERP’s data team.
focuses on the unique and combined impact of programs on advancing institutional priorities

For example:
What is the impact of Program X on time to graduation, when we control for the effect of other programs the student encounters?
systematic investigation of the progress of a program in attaining its goals and the effectiveness of continuous improvement efforts

- Does the program do what it is supposed to do?
- What is the association between the program and its projected outcomes?

**Evaluation - often intended to contribute to a decision**

Reasons for conducting program evaluation:
- Monitor progress to the stated goals
- Improving program performance
Does the funding agency require an evaluation?

If yes, what are the requirements for the evaluation, as stated by the funding agency?

- **Independent Evaluator** – not part of the research team
- **Internal Evaluator** – part of the researcher’s institution
- **External Evaluator** – (generally) outside the researcher’s institution
Six Phases of Evaluation

1. Develop a conceptual model of the program and identify key evaluation points
2. Develop evaluation questions and define measurable outcomes
3. Develop an evaluation design
4. Collect data
5. Analyze data
6. Provide information to interested audiences

From NSF publication, *The 2002 User-Friendly Handbook for Project Evaluation*
Evaluation Section of Proposal: Plan

- Evaluation Plan
  should assure potential funder that there is a way to know whether you achieved your goal

  - Goal(s) should be clearly stated.

  - Project objectives should be measurable.
Evaluation Methodology Across Time

- **Methodology** - may examine:
  - **process** - implementation activities, measures of progress to the goal
  - **product** - outcomes, impact
Formative Evaluation Measures

are often related to examining the implementation of the program
provide information that is useful for improving the program

“feedback”

Summative Evaluation Measures

provides information on the program’s impact and efficacy

Does the program do what it is supposed to do?

“evidence”
Suggestion

Describe evaluation throughout the life of the project. This way, you will have information for making mid-project corrections if necessary.
Evaluation Section of Proposal: Methodology

- Describe measures

- Mix methodologies – use quantitative and qualitative measures, as appropriate
  - clarifies results
  - allows for more converging evidence
  - allows for development of the project
    - *e.g. Is another type of measure needed in Year 2?*

Remember: Not everything can be measured with a survey.
Evaluation Section of Proposal: Dissemination

- What do you expect might be learned from the evaluation?

- With whom might you share this information?
  - conference presentations
  - website, blog, or listserv
  - journal article or written publication for practitioners

Funding agencies want to know that your project will have a life beyond the grantee’s lab.
Final Considerations, Depending on the Grant Program

- **Sustainability**
  Some funding agencies will want to know how you plan to continue your great work.

- **Risk Assessment**
  If things do not go as planned, what is Plan B?
Why not have someone else develop the evaluation plan?

- As the PI, you know the project, its context, and theoretical considerations best.

- The value base of the evaluation is important. (The grant program already states a purpose.)

- By thinking through the evaluation ahead of time, you will be prepared and to talk with potential evaluators and assess how they can be of assistance to you.
To Summarize

- The evaluation framework must be consistent with the research plan.
- The PI must be able to explain how the program is expected to reach the stated goals.
- The logic model template you have is a tool—it is flexible and can be changed to suit the needs of your program proposal.

The best evaluation plans are developed when the PI (and co-PIs) have clear goals and objectives.
Key Questions – Linked with Program Goals

WALLY, WHAT ARE YOUR GOALS FOR THE COMING YEAR?

MY GOAL IS TO REPLACE MY SOUL WITH COFFEE AND BECOME IMMORTAL.

I MEAN SOMETHING ABOUT WORK.

OH, I THOUGHT YOU SAID MY GOALS.

More about those Key Questions...
Key Questions:

- What do you want to accomplish with your program?
  - Goals
  - Objectives

- How will you accomplish these goals?
  - Strategies / Implementation Steps
  - Rationale

- How will you know you have reached these goals?
  - Measureable Outcomes
Logic Models: A Flexible Tool

<table>
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<th>Inputs</th>
<th>Activities</th>
<th>Short-term Outcomes</th>
<th>Long-term Outcomes</th>
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<td>Proposal to Foundation</td>
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</table>

<table>
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<tr>
<th>Objectives</th>
<th>Steps</th>
<th>Tasks &amp; Who is Responsible</th>
<th>Outcome Measures</th>
<th>Dissemination Strategy</th>
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<tr>
<td>NSF Proposal</td>
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</table>

- **Inputs**
- **Activities**
- **Short-term Outcomes**
- **Long-term Outcomes**
Examples of Program Evaluation
Innovation through Institutional Integration (I^3) challenges faculty, students, and others in institutions of higher education to think strategically about the creative integration of NSF-funded awards, with particular emphasis on awards managed by programs in the Directorate for Education and Human Resources (EHR).
I³ Research Questions

- Impact of UTEP’s I³ Cyber-Infrastructure effort on broadening participation in STEM fields on students
  - What students were served?
  - Did the CI and educational efforts broaden participation among women and students from underrepresented groups?

- Features of the CI and educational efforts of this I³ project that were particularly effective or not effective for student success, according to students
  - Undergraduate students -- effective components
  - Graduate students -- effective components

- Institutional changes in organization and/or culture resulting from the Pro-STEM Council

- Impact of UTEP’s I³ CI effort on collaborations among faculty across the campus?
  - Increases in the number of interdisciplinary, synergistic projects started?
  - Increases in the number of interdisciplinary proposals for funding submitted?
  - Increases in the number of publications (any type) co-authored, or patents sought as a result of interdisciplinary work among faculty and/or students?
  - Among collaborative efforts that led to increases in interdisciplinary courses, publications, patents, and grant proposals, what factors of the I³ project do faculty and I³ project leaders cite as being effective or not effective?
Review I3 Evaluation Logic Model
Example 2: Lumina Foundation Objectives

- Create a model for identifying factors that affect transfer student success by studying students who transfer to UTEP.
- Develop a robust understanding of non-traditional student success by applying the first-time student success model at two distinct MSIs.
- Foster the use of data-driven models for continuous improvement at two MSIs.
Research Questions

- What factors affect EPCC transfer students’ success at UTEP?
  - Departure
  - Timely graduation
  - Classification of students by risk level

- Factors that affect students who transfer with an Associate’s Degree

- Factors that affect students in Dual Credit or Early College High School
  - Transitional Issues
Review Lumina MSI Evaluation Logic Model
Evaluation has a Cost

- The budget for evaluation often totals between 5-10% of the awarded amount.

- Evaluator should be contacted soon after the evaluation goals, objectives, and possible methodologies are thought through.
Larger grants = more work and higher costs

- PI can sometimes evaluate own project—but there are limitations—may happen with small projects

- Larger projects—involve developing an evaluation report that is in-depth
## What Determines the Cost of an Evaluation?

<table>
<thead>
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<th>Possible Tasks in an Evaluation</th>
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<tbody>
<tr>
<td>• Initial Consultation &amp; Planning</td>
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<tr>
<td>• Development of Measures</td>
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<tr>
<td>• Development of an evaluation plan and/or logic model</td>
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<td>• Test development/ Validation/ Standardization</td>
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<tr>
<td>• Literature Review</td>
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<td>• Focus Group Development &amp; Administration</td>
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<tr>
<td>• Data Request / Data Tools (CIERP / School Districts/ State)</td>
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<td>• Simple Data Analysis</td>
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<td>• Survey Development</td>
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<td>• Survey Results Summary</td>
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<tr>
<td>• Annual Report Prep Assistance</td>
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<tr>
<td>• Longitudinal Report Prep Assistance</td>
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What Do You Expect from the Evaluator?

- Coordination of the evaluation?
- Development of Instruments?
- Synthesis of literature about evaluation in the area?
- Data Analysis?
- Proactive evaluation?
  - CIERP’s strength—adding insights about work that is related to key institutional goals.
  - Also requires additional analyses and involves drawing insights
Finding an Evaluator

www.evalu.org
Other Considerations

- Identification of Content Experts
  A researcher in math or science may not have expertise in pedagogy
  - e.g., math education, science education, engineering education projects
  - Biostatistician for environmental/public health projects

- ORSP Expertise Database
Questions?

Contact Denise at x5117 or dcarrejo2@utep.edu