Three Common Evaluation Fails and How to Prevent Them

EvaluATE Webinar Series
January 30, 2019

Slides, video, and resources: bit.ly/knestis19
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Materials

Slides
Resources
Recording

Introductions

Mike Lesiecki
Kirk Knestis
Lori Wingate

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Behind the Scenes

Emma Perk
Lyssa Wilson Becho
Mike Rudibaugh
Cynthia Williams
Janet Pinhorn
Shannon Payne

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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.
Three Common Challenges

- Project Implementation Delays
- Evaluation Scope Creep
- Project Changes
Implementation Delays

When the program or other innovation being evaluated is not implemented on the planned timeline.

Award or contract delays
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Lengthy procurement

Staffing changes

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External factors

Development delays

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Scope Creep

When the client needs something more or different than was planned for the evaluation, increasing the time and cost of the evaluation.

External influences
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Stakeholder needs

Other project needs
**Project Changes**

When the PI or project team makes decisions to change the project’s audience, activities, objectives, or theory of action (logic model)

**New components**
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New participants

Changes in delivery

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Changes in outcomes

CHAT

What challenges have you faced that threatened your evaluation?
Evaluation is MESSY

Complex programs
Complicated and changing contexts
Difficulties navigating organizations
Competing pressures

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Which is the most effective option to prevent challenges from becoming fails?

EVALUATION PLAN

- Legal Contract
- Scope of Work
- Study Protocol

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**Legal Contract**

A binding commitment agreeing to an evaluation, committing the parties to specific obligations using lawyer language.

- General statement of work
- Period of performance
- Price and invoicing details
- Specific terms and conditions
**Scope of Work**

Description of evaluation services and deliverables in sufficient detail to avoid confusion over the life of the work

- Evaluation purpose
- Breakout of activities
- Timeline
- Deliverables, notably reporting

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Study Protocol

Technical details of the evaluation study (or studies) at the center of the scope of work

Study design  Instrumentation  Data collection  Analysis
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Questions?

Mike
Kirk

Dealing with Common Challenges
an evaluation drama in three short acts

Act 1: Project Implementation Delays
Act 2: Evaluation Scope Creep
Act 3: Project Changes

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New Lab Equipment

The Project

New Courses

Faculty Training

The Evaluation

- Implementation of funded activities
- Faculty readiness to teach new courses
- Student satisfaction
- Student learning
- Student persistence and completion

Document review

Student survey

Observation of labs

Interviews

Course-embedded student assessments

Analysis of institutional data

Observation of faculty training

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ACT 1: The Delay

Kirk Evaluator
Lori Client

Example: Scope of Work

<table>
<thead>
<tr>
<th>Key Activities and Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Calendar Year</td>
</tr>
<tr>
<td>Project kick-off</td>
</tr>
<tr>
<td>IRB, data sharing</td>
</tr>
<tr>
<td>Logic modeling</td>
</tr>
<tr>
<td>Informal update calls</td>
</tr>
<tr>
<td>Development</td>
</tr>
<tr>
<td>Study protocol</td>
</tr>
<tr>
<td>Develop observation</td>
</tr>
<tr>
<td>Develop student questionnaire</td>
</tr>
<tr>
<td>Finalize student assessment tools</td>
</tr>
<tr>
<td>Implementation interviews</td>
</tr>
<tr>
<td>Pi et al.</td>
</tr>
<tr>
<td>Document review</td>
</tr>
<tr>
<td>Observe instructor PD</td>
</tr>
<tr>
<td>Instruction</td>
</tr>
<tr>
<td>Student questionnaire, pre</td>
</tr>
<tr>
<td>Lab observation</td>
</tr>
<tr>
<td>Secure extant student data</td>
</tr>
<tr>
<td>Formative summary</td>
</tr>
</tbody>
</table>

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Example: Contract

Phone: (410) 369-1779
Contact: Kirk Knestis, Ph.D.
E-mail: kirk@inciter.io
FEIN: 56-2557461

Acting as an independent contractor (hereinafter Inciter) states that:

I. Contractor Duties: Inciter will provide an evaluation of the college’s NSF-funded expansion of additive manufacturing certificate program coursework and teaching labs. A detailed description of the services and deliverables to be provided is described in the Scope of Work and Study Protocol documents supporting this agreement.

II. Period of the Contract: This contract shall be effective on October 1, 2018 or upon such date as it is duly executed and shall remain in effect until September 30, 2019 or until all obligations set forth in this contract have been satisfactorily fulfilled. This is anticipated to be the initial year-to-year contract for a 3-year engagement ending in June, 2021.

III. Terms of Payment: The total price of 2018-2019 evaluation services will be $28,000.

ACT 1: Recap
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ACT 2: The Creep

Kirk Evaluator

Lori Client

Example: Study Protocol

Evaluation Protocol Template

Based on CMB requirements, consistent with typical IRB submission form requirements.

1. Study Title – may be different from the client name and/or grant title
2. Study Purpose and Objectives – the purpose of the research, rather than the purpose of the project being evaluated
3. Research Question(s) – primary and secondary questions as appropriate, include formal hypotheses to be tested, if applicable
4. Data Needs Summary – indicating variables of interest, instruments and/or protocols, and timelines/benchmarks
   a. (e.g.) Tabulated data to be collected, aligned with logic model elements (activities and outcomes)
   b. (e.g.) Crosswalk of research questions and data to be collected
5. Instrumentation – by instrument or protocol
   a. Processes for collecting data, including extent information
   b. Instructions to study participants
   c. Time requirements
   d. Validation, per “Instrument Technical Documentation”
   e. Sampling strategy, if applicable
6. Study Populations – by group from which data will be collected
   a. Anticipated benefits – include description of and justification for incentives for participants
   b. Anticipated risks – discussion of questions/processes likely to be deemed “sensitive”
   c. Level of identification – identifiers, anonymity/confidentiality, record maintenance, correspondence
   d. Applicable consent/assent processes
7. Data Analysis – by research question, description of how data will be organized and analyzed

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23
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January 30, 2019

Example: Scope of Work

<table>
<thead>
<tr>
<th>Service and Deliverable Activity</th>
<th>Example Tasks</th>
<th>Direct Costs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>Tasks related to managing communications and work, e.g., phone calls with the client, in-person meetings, filling out, etc. Includes IRB and data sharing agreements</td>
<td>2</td>
<td>$3,981</td>
</tr>
<tr>
<td>Study Design</td>
<td>Change to existing logic model and indicator grid. Study design updates and documentation</td>
<td>2</td>
<td>$3,532</td>
</tr>
<tr>
<td>Instrument Development</td>
<td>Develop course and lab observation protocols, course questionnaire, PDA and interview protocol, coordinate administration and development of student assessment tools (e.g., project rubric)</td>
<td>3</td>
<td>$6,932</td>
</tr>
<tr>
<td>Data Collection</td>
<td>Student questionnaire (100 copies), lab observation (10), include existing student data from R</td>
<td>0</td>
<td>$4,992</td>
</tr>
<tr>
<td>Data Management and Analysis</td>
<td>Coordination and quality control of data collected. Descriptive analyses for reporting</td>
<td>2</td>
<td>$3,922</td>
</tr>
<tr>
<td>Reporting</td>
<td>Quarterly formative summaries</td>
<td>0</td>
<td>$7,352</td>
</tr>
<tr>
<td>Direct Costs</td>
<td>Site visit travel ($2000), conference travel and per diem ($300)</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td>27</td>
<td>$37,118</td>
</tr>
</tbody>
</table>

ACT 2: Recap

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ACT 3: The Change

Kirk
Evaluator

Lori
Client

Contract, Scope and Protocol

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(📝 + ⌬ + 📖) + 🖋 =

Effective Negotiation and Fewer Fails
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Resources

Evaluation Protocol Template

Project Scope Template

Kirk
kirk@inciter.io

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Questions?

Mike

Kirk

BASIC PRINCIPLES OF SURVEY QUESTION DEVELOPMENT

February 20
1 – 2 p.m. Eastern

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Please take the

FEEDBACK SURVEY

common evaluation fails and how to prevent them

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