2015 HBCU-UP/CREST PI/PD Meeting

Evaluation 101

B. Jan Middendorf
February 19, 2015

Division of Human Resource Development
Directorate for Education and Human Resources
National Science Foundation
Overview

► NSF Expectations for Evaluation
► Purpose and Use of Evaluation
► Lessons Learned and Advice from PIs
Why does it Matter?

- Learning & Accountability at all levels
- Answers “what’s working, why, and under what circumstances?”
- Provides a course of action for modification, if necessary
- Provides critical evidence of results and impact, in both quantitative and qualitative terms
Expectation for NSF Evaluations

- Accomplishing Goals
- Building the Knowledge Base
- Informing Program Improvement & Future Design
- Conducting Rigorous Evaluation: Effectiveness/Impact Evaluations
- Assessing Program & Results
- Setting Ambitious Targets & Evaluating Outcomes
- Evaluation for Learning & Accountability

Evaluation for Learning & Accountability
Expectations for Evaluation

- Independent, qualified evaluator
- Evaluation based on scope of project
- Well-articulated Evaluation Plan
  - Based on a logic model / program theory
  - Utilizes a robust, appropriate evaluation design
  - Includes formative and summative evaluations
  - Identifies measures that are tied to expected outcomes
- Demonstrates impact of program
Evaluation Considerations

- **HBCU-UP/CREST Annual Report Requirements**
  - highlights and productivity
  - longitudinal data collection (CRESTweb data collections)
  - Impact Measures

- **Evaluation Plan**
  - internal and external components
  - reliability, validity, feasibility, and functionality
  - Cultural Competence - reduce implicit bias

- **Advisory Boards/Committees**
  - internal and external
Quick Exercise:

► Spend three minutes thinking about your best evaluation experience

► Next share your experience with the person next to you and then listen to their experience
Evaluation Plan

• Should describe how the evaluation will determine the accomplishment of project goals and project impact.

• Should be based on a Logic Model or other tool that relates project goals to activities and to outputs, outcomes, and impact.

• Should include formative and summative components and both qualitative and quantitative methodology.
Vocabulary

► Formative Evaluation
  – Generating information to improve

► Summative Evaluation
  – Collecting data to judge ultimate success

► Impact Evaluation
  – Judging the overall worth and utility of the project results
Effective Evaluation Planning

• Develop at the beginning of the project with the project team

• Involve stakeholders in the identification of relevant questions and indicators

• Need to determine how you are going to use the data to be collected

• Focus on outcomes of critical interest
Guiding Evaluation Questions

• *Awareness, Attitudes, knowledge and skills* - What did the target audience know before they participated? What do they know now? Did their knowledge and/or attitudes change as a result of participation in project?

• *Behavior, practices and policies* - What did the target audience do before they participated? Are they doing something different now?

• *Environmental, Social, Economic or Educational System* - What were the attributes of the system? Did they change as a result of project?
Advice from Veteran PIs

• Engage Evaluators at the beginning
• Understand the different types of evaluations to choose the best fit
• Develop a logic model, where appropriate
• Seek evaluation workshops (e.g. QEM) to inform you and your team
• Effectively engage your advisory committees and boards
Logic Model Framework

PLANNING

Inputs → Activities → Outputs

OUTCOMES - IMPACT

Short | Intermediate | Long

Environment/Context → Assumptions

EVALUATION
Quick Exercise:

► Spend two minutes thinking about how you found your evaluator and/or team

► Next share your experience with the person next to you and then listen to their experience
Finding an Evaluator

- Word of Mouth
- American Evaluation Association (AEA) Database
- Universities
- Grantee Networks
- Put out an RFP
Hiring an Evaluator

• Approaches and Experience
• Subject Matter Expertise
• Work Style – is this a good fit?
• Timeline and availability
• Scope of Work – map out the details
• Fees and Costs
NSF Evaluation Resources

• Common Guidelines for Research & Development

• The 2010 User-Friendly Handbook for Project Evaluation

• User-Friendly Handbook for Mixed Method Evaluations,
NSF Evaluation Resources

• Framework for Evaluating Impacts of Broadening Participation Projects

• AAAS Measuring Diversity: An Evaluation Guide for STEM Graduate School Leaders