

Strategies for NSF-Funded Workshop Development and Implementation

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Overview

The goals of the session are to

1. Examine workshops as vehicles for increasing and broadening project and research impacts
2. Develop the foundation for specific workshops that the participants wish to hold

Activity	Time
Overview	5 min
How to Develop a Workshop Case Studies	10 min
Panel Q & A	10 min
Guided Workshop Development	40 min
Report Out & Wrap-Up	10 min

What is a workshop?



Examples of Workshops

- ▶ Disseminating results from CAREER, RET, or other research studies
- ▶ Building national research agendas
- ▶ Developing coalitions or networks

What are the benefits?



How to Develop A Workshop

- ▶ What are the goals for the workshop?
- ▶ What are the products for the participants?
- ▶ What are the products for you and your organizing team?
- ▶ Who is the audience?
- ▶ What are the logistics?
- ▶ What budget is necessary to accomplish the logistics?

CASE STUDIES - Who's Not at the Table

- ▶ **Who's Not At The Table? Building Research Capacity for Underserved Communities in Engineering**
 - ▶ NSF grant #EEC 1551605, project funded 2016
- ▶ **Goal of project:** develop a national research agenda for broadening participation in engineering
 - ▶ LGBTQ+, First generation/low income, veterans, disabilities
- ▶ **Collaboration among 3 PIs**
 - ▶ Clemson University (Engineering and Science Education, **Social Capital**)
 - ▶ Drexel University (history, STEM equity)
 - ▶ University of Washington (disability and accessibility)

CASE STUDIES - Who's Not at the Table

- ▶ **Goals of workshop:** engage members of the research and practice community in dialogues about challenges to inclusive participation in engineering and potential research paths
 - ▶ Leverage various areas of expertise participants offered about these communities to generate and collect data from which the research agenda emerged
 - ▶ Intentionally incorporate inclusive and accessible practices throughout the workshop
- ▶ **Participant recruitment strategy:** advertised in professional societies, invited individuals to apply, requested colleague recommendations
- ▶ **Support structure:** engaged university staff, graduate students, other faculty, university administrators (dean of engineering college)
- ▶ **Evaluation:** Advisory board, and hired an external evaluator. Both were engaged throughout the planning and execution of project and workshop event

Case Studies - Building Research Capacity for STEM Faculty Development

HOW THE IDEA WAS CONCEPTUALIZED:

- ▶ STEM Faculty Development Collaboratory developed 2015
- ▶ Two Engineering and Science Education Faculty
- ▶ Two Education Faculty
- ▶ ESED a natural department to host as only STEM education department of its kind
- ▶ Vision to focus on STEM Faculty
 - ▶ Research, teaching, leadership, service

Case Studies - Building Research Capacity for STEM Faculty Development

TIMELINE:

- ▶ Communication with NSF program director started Nov 2015
- ▶ Submitted proposal March 2016 with external evaluator identified
- ▶ Award received August 2016
- ▶ Workshop planning Fall 2016
 - ▶ Invites and Advertisement September and October
 - ▶ Open applications September and October
 - ▶ Participants Selected November
- ▶ Workshop held Feb 2017 - 41 non Clemson participants and 12 from Clemson

BUDGET (numbers are approximate)

ITEM	HATS
Salaries	\$10,000
Evaluator	\$3,843
Graduate Student and Tuition	\$12,117
Benefits	\$5,082
Participant Costs (Travel and Food)	\$43,000
Facilities Rental	\$1,000
Accessibility	NA
Materials and Supplies	\$1,000
PI Travel	\$6,238
Indirects	\$17,707
TOTAL	\$99,987

Panel Q & A

- ▶ Time for you to ask questions before beginning your work.

Session Wrap Up

- ▶ For any help on developing a workshop, contact us at:
 - ▶ STEMFACDEV@clemson.edu
- ▶ For more information about our two workshops see our handouts.
- ▶ If interested in participating as an affiliate, fill out a card.
- ▶ If interested in receiving the PowerPoint, fill in sheet with contact information.

Questions asked during review

- ▶ *The budget includes support for a graduate student and tuition. It appears that this student will primarily work on workshop logistics which are more appropriately handled by a professional staff member. Please either submit a revised budget with a staff member in place of the student, or explain the intellectual contribution to be made by the student (e.g. data collection, analysis, etc.).*
- ▶ *One reviewer was not clear about what a research agenda for faculty development means.*
 - ▶ *Is this an agenda to research faculty development programs? Research on how faculty develop? Research on how faculty learn*
 - ▶ *A related question is, how does creating a research agenda for faculty development align with the stated overarching goal to “provide developmental support to STEM faculty”?*
- ▶ *Various aspects of the workshop need clarification.*
 - ▶ *What criteria will you use to select participants?*
 - ▶ *How will it be facilitated?*
 - ▶ *How will you prompt participants to develop the research agenda?*
- ▶ *Provide additional justification for the need you describe in your proposal.*
 - ▶ *For example, one reviewer pointed out that the causes for low retention given (large class sizes, language barriers, faculty in an environment that promotes research) are not generally amendable to repair through workshops.*
 - ▶ *This reviewer also stated that, although you use student retention data as part of your justification, retention in STEM is not worse than other disciplines. Overall, a tighter connection between the problems and the proposed workshop is needed.*
- ▶ *Please provide evidence that you will be able to attract participants.*
 - ▶ *There is some concern that the location at Clemson is not near major airports*
 - ▶ *and that the proposed time during the semester may limit attendance.*
 - ▶ *Also, how will you ensure a diverse (female, underrepresented minorities) group of participants?*