Evaluation of the National Academy of Engineering’s “Engineering Equity Extension Service (EEES)”

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EEES Train-the-Trainer Model

Experts
(Gender Equity Research and Practice)

EEES Extension Agents
(Collaborating Organization Staff and Selected Members)

EEES Clients
(Individual Members of Collaborating Organizations)

Middle School Students of PLTW Teachers
Undergraduate Students of ASME Professors
Students who Participate in IEEE Outreach

PLTW = Teachers
ASME = Professors
IEEE = Volunteers
Evaluation of the Train-the-Trainer Model

- Attend and observe annual meetings
- Conduct Web-surveys of annual meeting attendees
- Conduct surveys of Experts and Extension Agents to document process, feedback, and perceived impact
- Conduct post-only surveys of Extension Agents and EEES Clients (members) from within each Collaborating Organization
  - Training survey
  - Webinar survey for the VSN
  - Needs assessment surveys
Questions about Extension Agents and EEES Clients

- How many Extension Agents does your organization have currently?
- How many Extension Agents will your organization have by the end of this project year?
- How many Clients have already been trained by your organization’s trainers?
- How many Clients will your organization have trained by the end of this project year?
- What systems need to be in place for GRG to gain access to your Extension Agents and EEES Clients?
Evaluation of Project Impact on EEES Clients

- Web-based surveys of EEES Clients
  - Retrospective questions on attitudes, knowledge, and practices before training
  - Plans for using information provided in the training
  - 6-month follow-up to measure changes that have been implemented
Evaluation of Project Impact on the EEES Target Population Members

- Recruit random sample of EEES Clients and measure change in students
  - Performance in engineering classes
  - Selection of and retention in engineering major
  - Educational and career pursuits
Questions about Impact

- What outcomes can your organization reasonably expect to deliver by the end of this project year (October 2007)?
- What outcomes can your organization reasonably expect to deliver by the end of the third project year (October 2008)?
- What systems need to be in place for GRG to gain access to students of your EEES Clients?
Sample Outcomes

- Among EEES Clients
  - Change in curriculum usage
  - Change in teaching practices
  - Steps taken to change climate in or out of classroom
  - Use of VSN

- Among Students
  - Change in student performance in class
  - Change in number of women choosing engineering major
  - Change in retention of women in engineering major
  - Educational and career pursuits of girls
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