

EPSCoR RII Education & Outreach Evaluation of Implementation

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EPSCoR RII Evaluation Data Collection Methods

- Participant Observation at Meetings
- Program Documents analysis
- Informal Interviews
- Data & data sets received through e-mail
- Program Products analysis (newsletters, brochure, web sites, etc.)
- End-of-year Surveys (37.7% response rate from research scientists from 7 institutions; 26.5% response rate from grad students & post docs from 5 institutions)



EPSCoR RII Collaboration

- **Interdisciplinary collaboration** – characterized by the majority (85%) of Research Scientist survey respondents and Graduate student and Postdoctoral student survey respondents (100%) as effective, and an essential part of their ongoing work
- **Interdisciplinary Mentoring** – Half (50%) of Research Scientist survey respondents characterized themselves as interdisciplinary mentors for undergraduates, graduate students and/or postdoctoral fellows



EPSCoR RII Collaboration

- **Inter-institution collaboration** – the majority (70%) of Research Scientist survey respondents indicated inter-institution collaboration has been implemented, and remaining respondents indicate that inter-institution collaboration has not begun in their group or partner institution

Expectations for Year Two

EPSCoR RII Collaboration

- Most expect increased collaboration during Year 2
- Some groups are examining effective models of face-to-face inter-institutional collaboration they have used in order to expand implementation
- The IOCOM communication network with desktop capabilities is expected to enhance inter-institutional and WP/Science Driver communication
- Some WPs have indicated the need for increased communication and collaboration with Science Drivers as products become ready for testing



Conclusions: Reaching Project Objectives (K-12, higher education and the general public)

- Project leaders and Research Scientists have implemented or are developing multiple effective programs and have distributed multiple informative products to educate and engage all targeted groups (K-12 students and faculty, undergraduate and graduate students, general public) through outreach activities that reflect EPSCoR RII participant expertise and scientific and engineering achievements.

Conclusions: Support for Tenure-Track Junior Faculty

- Multiple grant programs have been developed and effectively implemented to support a large number (77) of non-tenured and tenure-track junior faculty in seeking advice from federal granting agencies for writing successful research grant proposals; presenting invited talks at national or international conferences; collaborating with scientists at national labs and industries; and exploration of novel research.

Conclusions: Engagement of Minorities/Underrepresented Groups

- Some individual Research Scientists (45% of survey respondents) and groups, a few outreach programs, and few grant programs have addressed the objective of engaging minority and underrepresented groups in STEM activities, research and graduate programs, and others are in the planning stages for Year Two.



Conclusions: Collaboration

- Interdisciplinary collaboration and mentoring has been effectively implemented in most groups and partner institutions, and program participants characterize it as an essential component of their ongoing work
- Inter-institution collaboration during Year O has been effectively implemented through some programs across some partner institutions and not implemented in others

Overall Project Effectiveness in Education and Outreach

- Data from multiple sources indicate that leaders and participants in the systemic EPSCoR RII Project have effectively planned, developed and/or implemented most proposed programs for all Education and Outreach objectives during Year One.

Emerging EPSCoR RII STEM Education & Outreach Models

- Regular Education & Outreach meetings
- Tri-state (AL-MS-LA) EPSCoR RII Conference
- Multi-focused grants for Junior Faculty
- LSU graduate student Professional Development Seminar Series
- Science & Engineering Research Day for Graduate & Undergraduate Students

Emerging EPSCoR RII STEM Education & Outreach Models

- Tulane Undergraduate Research Program - recruitment from minority/underrepresented groups
- Collaboration models involving graduate students, post docs, &/or Research Associates
- Expertise & achievement dissemination & networking (cross-institution and cross-state collaboration, internal grants, SoS, publications, project products, etc.)

Model Development for Internal Dissemination & Exportability

- Generate descriptive program information and participant awareness strategies
- Identify proposed impacts across participant levels
- Identify appropriate interdisciplinary and inter-institution participation
- Generate & analyze program impact data
- Identify what was effective & why; what was not effective & why not
- Generate a clear and complete model description
- Plan dissemination and exportability strategies