Engagement through the Disciplines 2006 National Outreach Scholarship Conference Columbus OH

Partnerships to Build Enduring
Understandings: Education, Outreac
and Broader Impact (EOBI) Workshop
for Science, Technology, Engineering
and Mathematics (STEM) Faculty

SueAnn Bottoms
Eda Davis-Butts
Sujaya Rao
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Development of the Education, Outreach, and Broader Impact Workshops for STEM Research Faculty

- Polling of research faculty about the need for the workshop
- Proposal presented to Research Office
- Formation of an ad hoc EOBI Committee
- Invitations extended to various research faculty and outreach practitioners
- Series of committee meetings and work assignments

A Scientist's EOBI Committee Participation



Able to communicate faculty perspectives, concerns and challenges which limit their involvement in outreach

Experience in a leadership role in a outreach program helpful to the committee

Personally greatly interested in outreach and interested in getting more colleagues involved

Content of the Introductory EOBI Workshops



- Faculty Perspectives on EOBI
- Addressing Diversity in EOBI
- Nuts and Bolts of EOBI
- Outreach Roundtables











Goals for Introductory Workshops

- Build better understanding of the challenges and opportunities of doing effective EOBI
- Create greater awareness of OSU outreach programs
- Begin to build the capacity of OSU as a leader in engaging researchers in meaningful and effective EOBI

Additional Content in the Advanced EOBI Workshop



- Levels of Commitment in EOBI
- EOBI Planning program design, budgeting, addressing diversity, and assessment and evaluation
- EOBI Showcase





An Untenured Scientist's Perspective



- Potential risks
 - Time commitment
 - Documenting 'scholarship' from outreach engagements
 - Convincing colleagues about the value of outreach
- Benefits
 - Visibility
 - Outreach funding adds to grantsmanship
 - Options available for documenting scholarship

Examples:

- Rao, S. Shamah, D., and Royce, L. 2003. Integrating graduates and undergraduates in science education in rural Oregon schools. American Entomologist. 49: 136-139.
- Rao, S. Shamah, D., and Collay, R. 2006. Meaningful involvement of science undergraduates in k-12 outreach. Journal of College Science Teaching (In Press).

Goals for Advanced EOBI Workshop

- Support a better understanding of the challenges and opportunities of doing effective education, outreach, and broader impact programming
- Build the capacity of researchers to accomplish meaningful and effective education, outreach, and broader impact programming by promoting linkages with OSU outreach programs









Participants in EOBI Workshops



Workshop	Research Faculty	Professional Faculty	Graduate Students
	23	22	2
II	21	14	3
*	20	17	2

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Summary of Workshop Evaluations

- All participants stated they would recommend to other faculty to attend the workshops.
- The workshops were identified as important steps in supporting faculty in addressing EOBI.
- Future efforts should include offerings for administrators to expand their understanding of the context of federal funding for scientific research.
- The networking of research faculty and outreach program faculty was highly valued and much

needed.



Key Points from Workshop Evaluations



- An infrastructure is needed to support research faculty in identifying appropriate strategies and partners to accomplish EOBI.
- The perceived lack of value in EOBI, the lack of incentives for faculty, and the lack of colleague and administrator support for EOBI are barriers to research faculty engagement.
- Engagement in EOBI will be facilitated by an explicit institutional agenda, on-going communication between research faculty and outreach practitioners, and appropriate funding to support the efforts.



Recommendations from Workshops

- Offer an ongoing series around specific topics
- Develop discipline-specific sessions
- Compile and deliver a report to the Faculty Senate
- Explore potential infrastructure to support EOBI
- Charge a faculty committee to gather information and make recommendations about EOBI at OSU
- Provide forum for research faculty to express their concerns and challenges in addressing EOBI



Some Collaborations Resulting from EOBI Workshops

- National Park Outreach Program and Hatfield Marine Science Center
- The SMILE Program and Mechanical Engineering Senior Capstone Project
- Science Outreach Course Rural Science Education and The SMILE Program





A Tenured Scientist's Perspective



Options:

- Negotiate job description to include more outreach responsibilities
- Continue hard core research and outreach without worrying as much about job security
- Less stress makes it more enjoyable!

Next Steps in EOBI Initiatives



- Reestablishment and recognition of EOBI Committee
- Institutionalization of workshops through the Research Office
- Collaboration with the Graduate School to support the professional development of STEM graduate students





SueAnn Bottoms

sueann.bottoms@smile.oregonstate.edu

Eda Davis-Butts

eda.davisbutts@smile.oregonstate.edu

Sujaya Rao

sujaya@oregonstate.edu