SBE and a Science of Broadening Participation

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Three divisions:
– Social and Economic Sciences (SES)
– Behavioral and Cognitive Sciences (BCS)
– Science Resource Statistics (SRS)
Percentage of College-Educated Science/Engineering Workers who are women and ethnic minorities, 1980-2005

SOURCE: NSF Division of SRS, Decennial Census Public Use Microdata Sample (PUMS), 1980-2000; and Census Bureau, American Community Survey, 2005.
Social, Behavioral & Economic Sciences

Disciplinary Programs

• Cultural Anthropology
• Physical Anthropology
• Archaeology
• Linguistics
• Social Psychology
• Economics
• Sociology
SBE Inter-Disciplinary Programs

- Cognitive Neuroscience
- Developmental & Learning Sciences
- Law & Social Sciences
- Perception, Action & Cognition
- Geography & Spatial Sciences
- Decision, Risk & Management Sciences
- Science of Science & Innovation Policy
- Innovation & Organizational Sciences
- Methodology, Measurement, & Statistics
- Science, Technology, & Society
- Documenting Endangered Languages
Science of Broadening Participation examples (NSF funded)

• Organizational Sciences
  – Gender segregation is related to economic development (Charles 2006).

• Science, Technology & Society
  – Culturally situated design tools (Eglash)
Science of Broadening Participation examples, cont.

• Sociology
  – The value-in-diversity approach (Herring 2009)
Why We Need A Science of Broadening Participation

- Assertiveness training programs do not lead to women’s success at negotiation.

- Diversity training programs do not increase the likelihood of minorities in management.

A science-based approach is needed.
Science of Broadening Participation Workshop, June 2008

- Multidisciplinary representation among 30 researchers from SBE, MPS, ENG
  - Elaborating on a Science of Broadening Participation.
  - Identification of important likely outcomes of such a science.
  - Interdisciplinary connections between SBE scientists and researchers in other fields employing BP strategies/policies.
Workshop Discussion Outcomes

• Realization that while a great deal of research is relevant to SBP, devaluation of SBE fields often leads to this research being cloaked.

• Discussion across disciplinary ‘silos’

• Community building
Other SBP Workshop
Conclusions

• Develop theoretical perspectives to guide research and policy
• Examine how factors vary in broadening participation for different groups
• Define the scope of SBP
• Strengthen societal impacts, going beyond ‘good faith gestures’
• Broaden participation in SBP
What would a SBP program look like?

• Inherently interdisciplinary
• Informed by and building social and behavioral science theories
• Methodologically rigorous, incorporating research that employs a variety of methods
Why SBP Important to Science and Policy

(with thanks to Helga Nowotny, World Social Science Forum plenary, May 2009)

1. Social innovation
2. Globality
3. Meaning
4. Context
Current Activities in SBP, led by Dr. Kellina Craig-Henderson

- Survey of SBE programs on relevant awards over past 3 years
- Presentations/discussion
  - CEOSE (Feb 09)
  - SBE-AGEP (4/09)
  - NIH Con. on Interventions BP in careers (5/09)
  - Assoc Psych Sci (5/09)
  - SBE Advisory Comm (5/09)