



Office of Educational
Innovation and Evaluation

Developing a Shared Understanding of Broadening Participation Research

B. Jan Middendorf
Cynthia A. Shuman
Valerie K. York

October 16, 2013

Research in Disabilities Education Synthesis Project (RDE-SP) :

Summarize/synthesize findings of the 2001-2011 NSF RDE initiatives aimed at broadening participation and achievement of individuals with disabilities in STEM education and associated professional careers. **HRD-1145541**

Supplemental Project:

Convene an expert panel to develop a shared definition of broadening participation research (BPR) and identify evaluation best practices for BPR and recommendations for the field.

Broadening Participation Research (BPR):

- is widespread as a key area of interest to many funding agencies
- has no shared definition (what does “broadening participation” mean?)
- can mean different things to different groups
- must be defined, to allow for a framework for its evaluation

- ⇒ **What:** Convening an expert panel
- ⇒ **Why:** To develop a shared definition of BPR and recommendations to the field regarding BPR evaluation best practices
- ⇒ **Who:** Select individuals who have studied and/or published in the field of BPR related to STEM education and career attainment and are knowledgeable about evaluation
- ⇒ **Where:** NSF in Arlington, VA
- ⇒ **When:** February 25-26, 2013

Expert Panelists

- Patricia Campbell - President, Campbell-Kibler Associates, Inc.
- Henry Frierson - Associate Vice President and Dean of the Graduate School and Professor, Educational Research and Evaluation Methodology, University of Florida
- Melvin Hall – Professor of Educational Psychology, Northern Arizona University
- Karen Kirkhart – Professor, School of Social Work, David B. Falk College of Sport and Human Dynamics, Syracuse University
- Joan LaFrance – Owner, Mekinak Consulting
- Joan McGuire – Professor Emerita, Department of Educational Psychology, Neag School of Education and Senior Research Scholar, Connecticut Center of Postsecondary Education and Disability
- Veronica Thomas – Professor, Department of Human Development and Psychoeducational Studies, Howard University

- 1) What are the attributes and/or characteristics of BPR?
- 2) What are effective approaches to evaluate BPR?
- 3) What are the indicators and/or metrics used to evaluate BPR?
- 4) What differentiates evaluating BPR from other research initiatives?
- 5) What are the challenges and/or limitations to evaluating BPR?
- 6) What recommendations are key for advancing the field of BPR?

Research on Broadening Participation (BP) in STEM should be an action-oriented, culturally and contextually responsive systematic inquiry that articulates and answers questions, provides explanations, and stimulates ideas around BP in STEM.

Impacts of this research can be on individuals, institutions, disciplines & professional practices.

When expectations for the impact of this research focus on underrepresented populations, the intent is to inform efforts to enhance inclusivity and remove barriers to participation, and create environments conducive to success.

Results: Key Ideas

- ❑ The underlying assumption within the definition is that broadening who is doing research can broaden the types of research questions posed and the types of inquiry conducted.
- ❑ It is important to use the results from BPR to improve policies and programs aimed at broadening participation.
 - ❑ This would include using evaluation data for improvement at the project level as well as across projects and lead to changing the culture and our understanding of STEM.
- ❑ More discussion is needed related to which populations are considered “underrepresented.”
 - ❑ It is important to be culturally responsive and to understand that which groups are considered under-represented populations will depend on the topic (e.g., even White males could be under-represented for certain topics).

Thoughts for Advancing BPR

- ◆ Promote research that helps us understand why research on BP is important!
- ◆ Support research on the strategies for the evaluation of BP (what methods/innovative strategies work)
- ◆ Develop research teams to include STEM and social science expertise
- ◆ Encourage fresh, innovative, risky approaches to research

- Given the vast number of projects related to broadening participation research, this topic is relevant and timely to evaluation.
- These efforts work toward developing a shared definition that will assist in providing a framework for better understanding.
- This is especially important given the current focus on BPR in the field of evaluation.

Results: Wordles

“When you think of BPR, what are the first three words that come to mind?”

Pre

Pre-Panel Words: "When you think of BPR, what are the first three words that come to mind?"



Office of Educational Innovation and Evaluation

February 25, 2013

Post

Post-Panel Words: "When you think of BPR, what are the first three words that come to mind?"



Office of Educational Innovation and Evaluation

February 26, 2013



Office of Educational
Innovation and Evaluation

Questions/ Comments?

October 16, 2013

OEIE Contacts

Jan Middendorf

Director

785.532.4716

jmiddend@ksu.edu

Cindy Shuman

Associate Director

785.532.3463

cshuman@ksu.edu

Valerie York

Evaluator

785.532.5266

vyork@ksu.edu

Wendi Stark

Evaluation Projects Coordinator

785.532.5489

wstark@ksu.edu

Office of Educational Innovation and Evaluation

2323 Anderson Avenue, Suite 220

Manhattan, Kansas 66502

785.532.5930

www.oeie.ksu.edu

This material is based upon work supported by the National Science Foundation under Grant No. HRD-1145541. Any opinions, findings and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.