

VISIONARY EVALUATION

FOR A SUSTAINABLE, EQUITABLE FUTURE

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Research in Disabilities Education: A Decade in Review Exploring Impacts, Outcomes, and Lessons Learned

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Presentation Overview

- Project Purpose
- Methods
- Preliminary Findings
- Lessons Learned
- Questions/Comments

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.

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Research Questions

The research activities of the project are designed to answer these basic synthesis questions:

- 1) How well have RDE projects met their project goals?
- 2) How have projects impacted their target audiences (e.g. faculty, students, teachers, and parents)?
- 3) In what ways have RDE projects contributed to the goals of RDE, Human Resource Development (HRD), Education and Human Resources (EHR) and National Science Foundation (NSF)?
- 4) What is the contribution of the RDE-funded Research/Demonstration and Alliance/Enrichment projects to the knowledge base of STEM education of SWD, educational transitions within the STEM "pipeline," student success in STEM courses and programs, and other related topics?
- 5) What is the impact of RDE-funded Alliances to the number and quality of SWD transitioned, retained, and completing associates or bachelor's degrees in STEM fields and the number of completers entering the STEM workforce or graduate STEM programs?
- 6) What other or unexpected outcomes were produced by these sets of RDE projects?
- 7) What are the primary lessons learned about the RDE program that can be elicited from the answers to questions 1-6?

Original Project Approach:

- Document Analysis of Annual Reports and Evaluation Reports
- Survey of Principal Investigators and Co-Principal Investigators
- Potential Interviews and Focus Groups at NSF Joint Annual Meetings
- Finalize Results and Disseminate

Revised Project Approach:

- Conduct Initial Focus Group at last JAM (2012)
- Request Annual and Evaluation Reports from PIs and Co-PIs to **conduct document analysis**
- Conduct Solicitation Analysis
- Develop PIs Profile Database
- Supplemental BPR Research
- Conduct Citation Analysis
- **Survey of Principal Investigators and Co-Principal Investigators**
- Conduct Comparative Analysis
- **Finalize Results and Disseminate**

RDE- SP Demographics

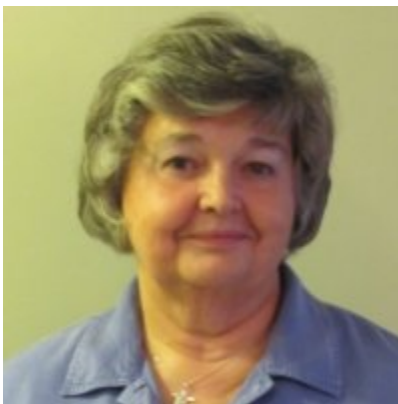
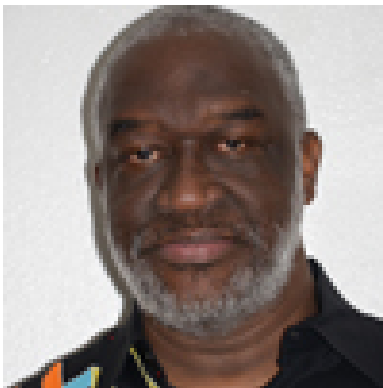
- Timeframe: 2001-2011
- Number of funded PIs: 97
- Solicitation Types: Research, Dissemination, and Alliances
- Number of projects: 116
- Geographic location: throughout the US

- Understanding Context
 - Focus Groups at JAM
 - Solicitation Analysis
 - Connecting with the field
- Supplemental Project due to BPR Research
 - Convene panel of experts (Spring 2013)
- Developing Portfolio of RDE Work
 - Database of PIs
 - Citation Analysis (AEA 2013)
 - Preliminary Document Analysis of Reports
- Survey of PIs & Co-PIs to complete the picture

Solicitation Analysis led to BPR Supplemental Project

- Based on Comparative Analysis of RDE solicitations from 2001-2011
- Convened 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.

Expert Panelists

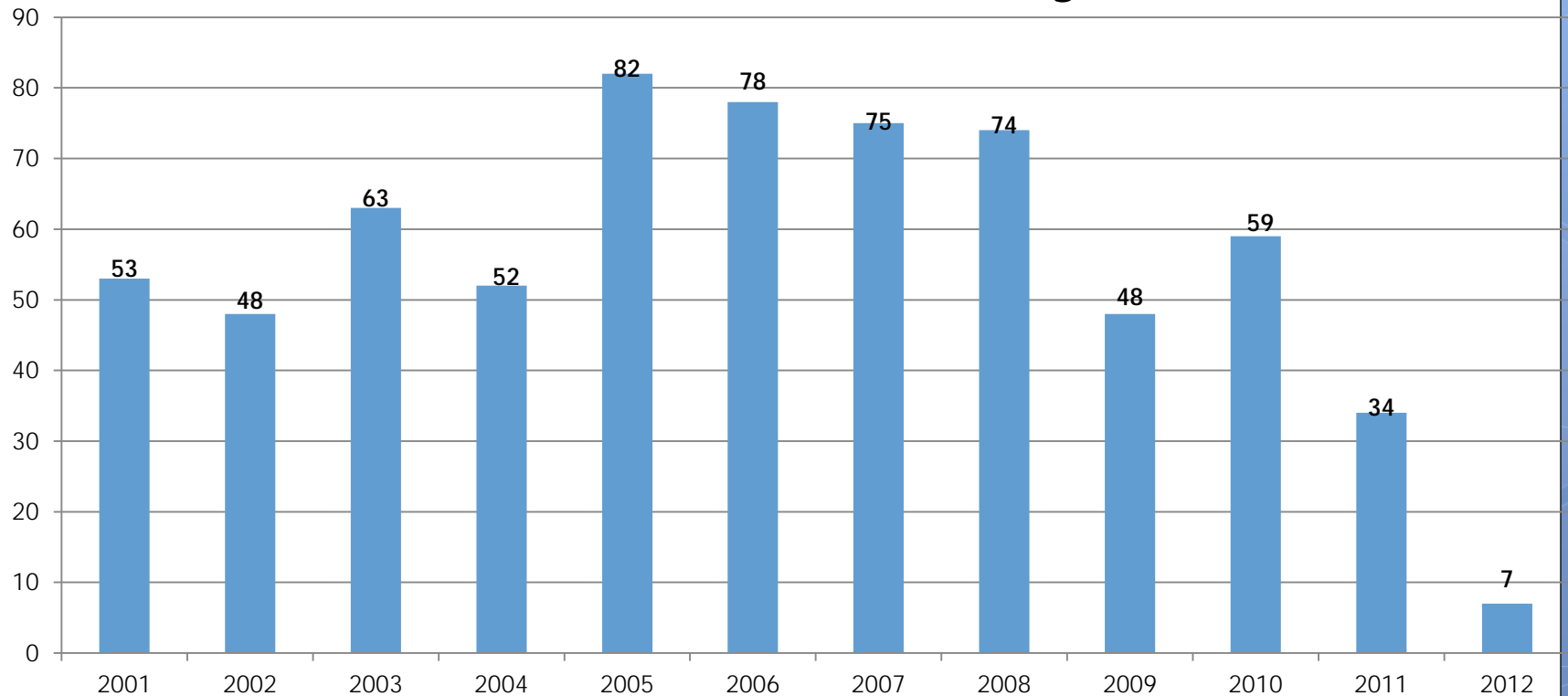


Research on Broadening Participation (BP) in STEM should be an action-oriented, culturally and contextually responsive systematic inquiry that articulates and answers questions, provides explanations, and stimulates ideas around BP in STEM.

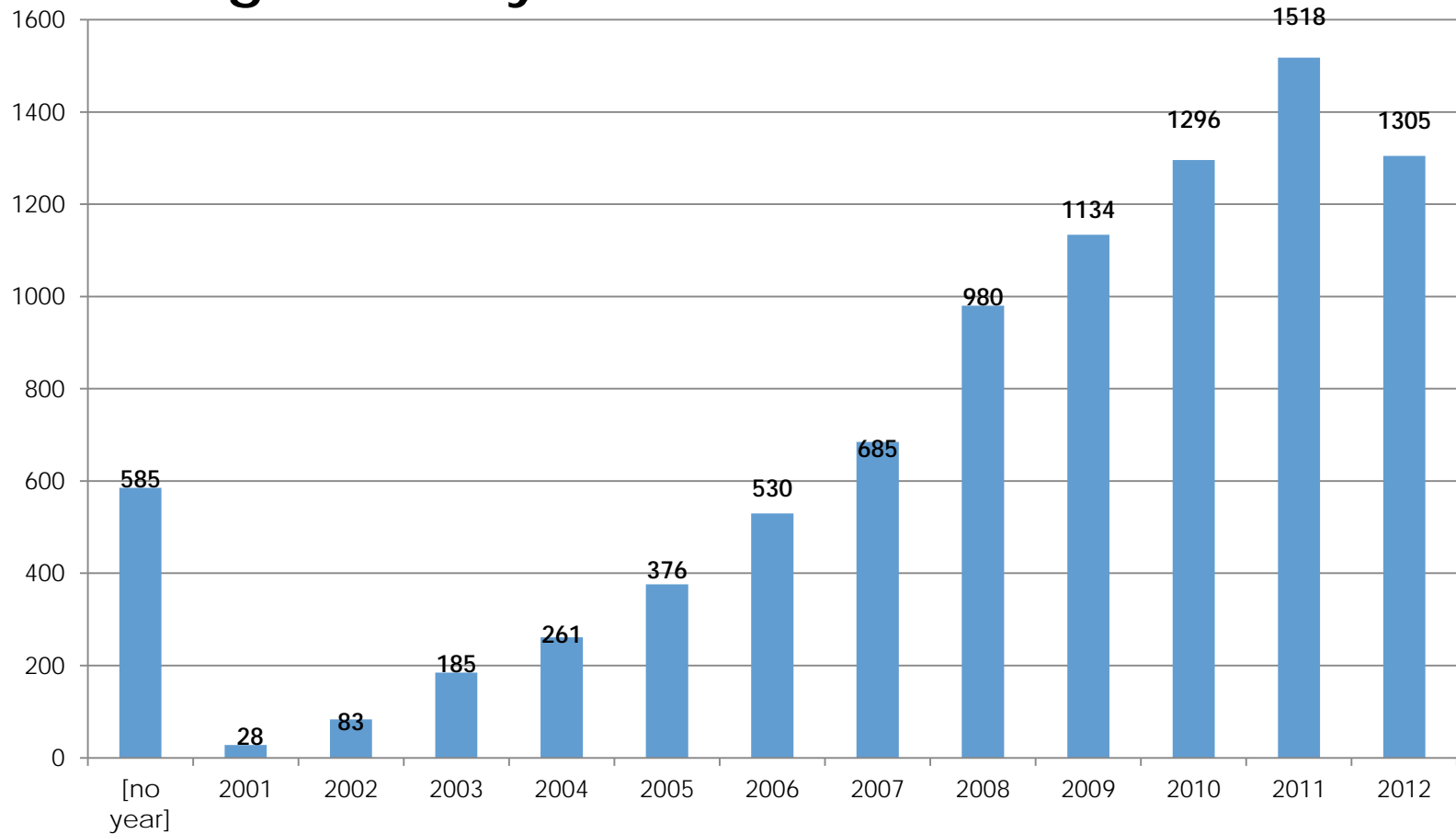
Impacts of this research can be on individuals, institutions, disciplines & professional practices.

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.

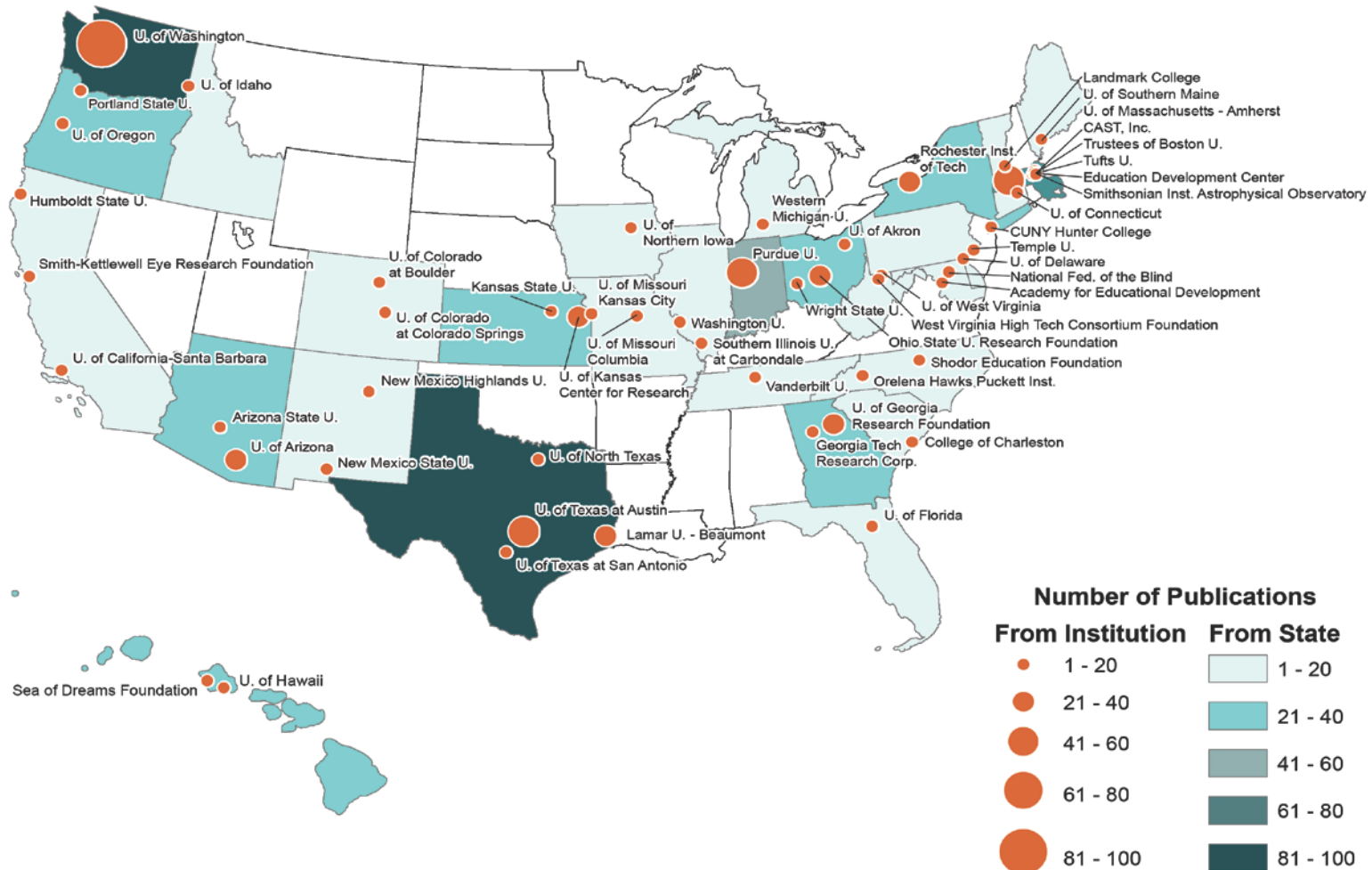
RDE Pls' Publications by Year



RDE Pls' Publications' Citing Works by Year



RDE Pls' Publications by State and Institution



Survey Demographics

- 67% Response Rate (57 of 87 PIs)
- Reporting on 76 Projects
- 11 Alliances and 49 Research & Dissemination project
- Well-Balanced Disabilities Focus
- Survey Components:
 - Projects' Contributions
 - Challenges
 - Lessons Learned

Contributions

- Publications
- Products and Trainings
- Advancing Research in the field
- Strengthened Networks

Survey Results

| Response Option | Alliance | Research & Dissemination | Total |
|--------------------------------|----------|--------------------------|-------|
| Audio/Video Product | 54 | 46 | 100 |
| Data/Database | 41 | 35 | 76 |
| Instrument/Equipment Developed | 26 | 306 | 332 |
| Invention | 5 | 4 | 9 |
| Newsletter/News Outlet | 49 | 8 | 57 |
| Presentation | 298 | 210 | 508 |
| Publication | 62 | 76 | 138 |
| Recruitment Materials | 43 | 21 | 64 |
| Report | 101 | 45 | 146 |
| Software | 2 | 25 | 27 |
| Teaching Aid | 15 | 21 | 36 |
| Thesis/Dissertation | 2 | 5 | 7 |
| Training Materials | 96 | 5018 | 5114 |
| Other: (Please specify) | -- | 8 | 8 |
| Total | 794 | 5828 | 6622 |

Challenges

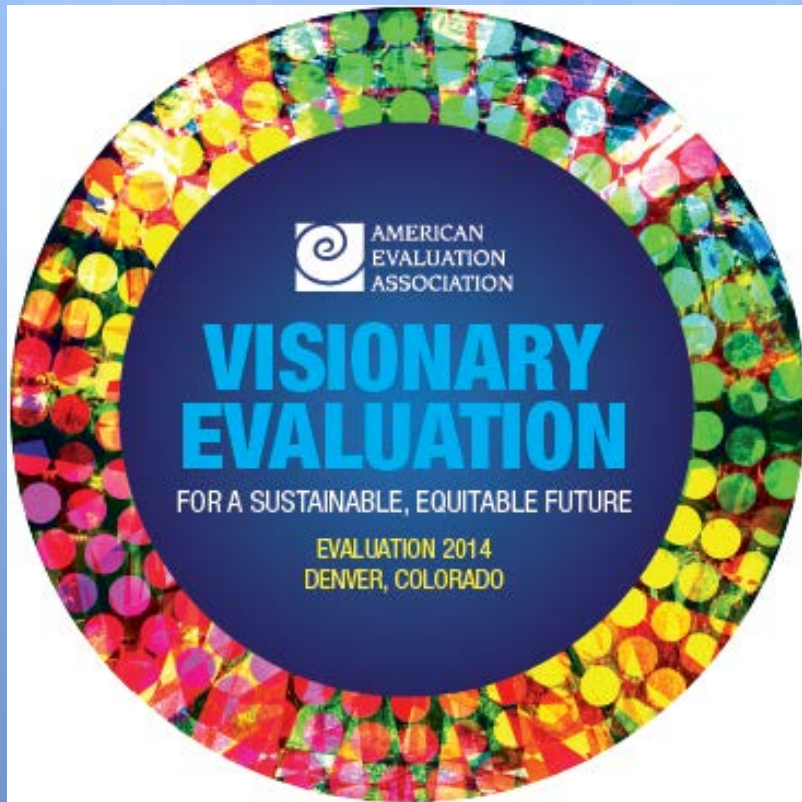
- Evaluation Related Issues (data collection, tracking participants, etc.)
- Administrative/Staffing Issues
- Recruiting Participants
- Time
- Engaging others

Outcomes and Impact

- Increased skills for working with students with disabilities (SWD)
- Increased confidence related to STEM
- Increased collaboration with all institutions types
- Ability of faculty to adapt to working with SWDs
- Total of 6,622 products were produced

Kaleidoscope of Understanding

- Flexibility
- Perseverance
- Building Trust & Relationships
- Learning from unexpected outcomes
- Broadening Perspectives
- Embrace the Journey!



Questions/ Comments?

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