

CAISE Practice and Research (PaR) Summary of **Research Agenda Processes**

Summary of findings: There are a variety of special interest groups within the education community who have undertaken the task of developing a research agenda for their fields. This brief survey attempts to identify the processes by which these groups created their research agendas, as well as how the agendas were disseminated and how feedback was gathered and integrated. The research agenda projects listed below are roughly organized by most helpful to us to least helpful.

In general, the research agendas were disseminated via publication in a journal or as a standalone report. None of the examined agendas had a feedback mechanism for the field to respond to the proposed agendas—although many involved review from organizing committees or outside non-participants before publication. Nearly all of the agendas involved a central coordinating committee of some kind (there was infrequent explanation as to how the committees were organized or selected). Typically, the research agendas below are organized around a small number of framing principles or topics, with specific questions (sometimes multi-disciplinary) falling under each general heading. It may be important to note that in all of the research agenda projects with a timeline, the process was at least a year long—in many cases, it was a multi-year process.

The impetus for the agendas were often to respond to the need for specific policies to support particular goals within education, and in at least one instance, was designed to address the perceived funding priorities of NSF. It was common for the agendas to grow out of one or a series of meetings of a core group of stakeholders/organizers. Additionally, several of the agendas were explicitly created to influence policymakers and policy decisions.

Link: http://www.apa.org/pi/women/programs/academe/stem-researchproject.aspx

Author: American Psychological Association (APA)

Title: Women with Disabilities in STEM Education Research Agenda

Development Project Publication/Source:

Year: 2011

About: This one-year project funded by the NSF aims to establish a



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five-year research agenda around identifying the barriers for entry of women with disabilities into the STEM fields (HRD-1138801), focusing on undergraduate education. The methodology for this project includes: conducting a pre-workshop survey of NSF and Department of Education Disability Education grantees; convening a workshop to develop a research agenda on attitudinal supports and barriers facing women

with disabilities in STEM education; and disseminating the agenda to the scholarly community AND the general public through accessible media. This is a current project and we could consider contact the PI, Shari E. Miles-Cohen at APA, for more information about their process. More information about the award:

http://nsf.gov/awardsearch/showAward? AWD ID=1138801&HistoricalAwards=false

Link: http://scholar.lib.vt.edu/ejournals/JITE/v34n2/Flesher.html

Author: Jeffrey W. Fisher, University of Iowa

Publication/Source: The Journal of Industrial Teacher Education Title: A Conceptual Framework for Research Agenda Development

Year: 1997

About: The paper outlines a conceptual framework for formulating research agendas. The framework is structured using a motivational criteria and is extended/put into practice via research, teaching, and service components. The author posits that at least in a university context, the gulf between research agendas/goals and application to society/practice may lie in the formulations of research agenda themselves. He proposes that there are three categories that should be included in agendas: research of interest, research of obligation, and research of opportunity.

Link: http://www.nap.edu/openbook.php?record_id=998&page=51
Author: Commission on Behavioral and Social Sciences and Education (CBASSE)

Publication/Source: Mathematics, Science and Technology Education: A

Research Agenda Title: See above

Year: 1996

About: This publication is a self-described tightly focused research agenda for STM education. The model of the agenda is an approximately 60-page document and is based on the idea that learning can be improved through the development of environments that support "quality learning time," which in turn affects the ability of learners to develop the reasoning skills that are necessary for STM



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eduation. The agenda outlines basic research questions to be addressed by those in the field: 1) the development of reasoning, 2) better instruction, 3) better settings for learning, and 4) better learning systems. No information is available on the process by which the agenda was created.

Link: http://www.jstor.org/discover/10.2307/40188680? uid=31347&uid=3739584&uid=2129&uid=2&uid=70&uid=3&uid=31 346&uid=67&uid=62&uid=3739256&sid=21101700965241 Author: Patricia E. Simmons, Herb Brunkhorst, Vincent Lunetta, John Penick, Jodi Peterson, Barbara Pietrucha, and John Straver

Title: Developing a Research Agenda in Science Education Publication/Source: Journal of Science Education and Technology

Year: 2005

About: This article refers to a Science Summit and is directed towards how the science education community (including researchers and practitioners) can influence policy. The paper emphasizes collaboration between scientists and educators. The authors suggest a "dynamic organizer" such as Pasteur's Quadrant for organizing a research matrix of topics, findings, needed areas of research, and policy implications. The paper focuses on the development of the agenda but the freely available abstract does not include a dissemination plan/next steps for this particular agenda.

<u>Link: http://musiced.nafme.org/srme/a-research-agenda-for-music-education-thinking-ahead/</u>

Author: The National Association for Music Education

Title: A Research Agenda for Music Education: Thinking Ahead

Publication/Source:

Year: 1998

About: The agenda also lists four additional arts education related research agendas, all from the mid 1990s. The process began by NAFME asking the wider music education and related research communities to submit research questions directly to them in preparation for their annual conference. NAFME undertook a content analysis of the questions in consultation with the research community, and then grouped the questions into three broad categories of study. The research agenda is consistent with NAFME's strategic plan and is disseminated via their website.

<u>Link: http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?</u> _nfpb=true&_&ERICExtSearch_SearchValue_0=ED403190&ERICExtSearch_SearchType_0=no&accno=ED403190



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Author: Enid Zimmerman

Title: Art Education: Creating a Visual Arts Research Agenda Toward the

21st Century.

Publication/Source: National Art Education Association (NAEA)

Year: 1994

About: This report outlines eight research areas with general guestions to be addressed in arts education. The process by which these questions were generated is not available in the publication abstract. A visit to the NAEA website shows that they have continuously tapped the community for research questions—most recently in 2008, when researchers invited the educator community to participate in a survey of research needs, which were complied into a report for the research community.

Link: http://books.google.com/books?

hl=en&lr=&id=B95bYND65gMC&oi=fnd&pg=PR9&dg=education+research+agendas&ots=Dj0cHlt7wL&sig=WjLWiEu2wK-

XSCKithkbVWiJaiE#v=onepage&g=education%20research

%20agendas&f=false

Author: National Research Council, Institute of Medicine

Title: Improving Schooling for Language-Minority Children: A Research

Agenda

Publication/Source:

Year: 1997

About: This book is the product of a process that started with an initial meeting of nine experts in the relevant field. The chosen Committee was tasked with: 1) reviewing what is currently known about the problem of educating English-language learners; 2) reviewing the strengths and gaps in what is currently being done to address the stated problem; and 3) making recommendations for research priorities, infrastructure to support that research, and the use of evidence to inform policy and practice in this area. The recommendations that resulted from the process are four broad principles that are then broken down into specific topical questions and academic areas of focus. The Committee also advises specific policy actions that should be taken to advance the agenda.

Link:

http://www.stanford.edu/group/ncpi/documents/pdfs/beyond_dead_reck oning.pdf (original suggested link:

http://news.stanford.edu/pr/03/highered.html)

Author: National Center for Postsecondary Improvement

Title: Beyond Dead Reckoning: Research Priorities for Redirecting



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American Higher Education

Publication/Source: Year: 2003

About: This essay is the product of a six- year-long process for identifying the most pressing research issues in higher education over the decade after the report. The organizing committee at the National Center for Postsecondary Improvement first consulted broadly with a wide variety of stakeholders and constituents, then held a series of national roundtables on the topic. They also looked at policy forums held over the project's six years to identify recommendations. As the final step in putting together the agenda, they submitted an initial draft to all who had been involved and invited comments. The resulting agenda outlines broad topics of questioning and detailed subquestions. It also directs questions to two specific audiences—policymakers and institutional leaders—who the authors believe can advance change and implement the agenda.

<u>Link: http://www.brookings.edu/research/papers/2012/12/learning-first-wagner-murphy-de-korne</u>

Author: Daniel Wagner, Katie Murphy, Haley De Korne

Title: Learning First: A Research Agenda for Improving Learning in Low-

Income Communities

Publication/Source: Center for Universal Education at Brookings

Year: 2012

About: This report is the product of a year-long effort to develop a research agenda, which was put together by a group of experts covering five different research areas. The research agenda focuses first on what we know, but also the grand questions/topics that researchers need to know more about. The report was distributed to the wider international learning research community.

Link:

http://www.project2061.org/publications/earlychild/online/perspect/champion.htm

Author: Alverna M. Chamption

Title: Toward a Research Agenda in Early Childhood Science,

Mathematics and Technology Education Publication/Source: project2061.org

Year: 1998

About: this research agenda for early childhood SEM education was created through a forum process organized by AAAS (with funding from NSF and the Dept. of Education OERI). The forum included



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"mathematicians and scientists, researchers and practitioners, teachers and administrators, and policy makers." The stated rationale for creating the agenda is to respond to NSF funding opportunities for research in early childhood learning. No explicit information is available about the process by which the agenda was created or disseminated.

Link: http://onlinelibrary.wiley.com/doi/10.1111/j.1467-

1770.1991.tb00690.x/abstract

Author: Graham Crookes; Richard Schmidt

Title: Motivation: Reopening the Research Agenda

Publication/Source: Language Learning

Year: 1991

About: This paper focuses on motivation as it affects second-language learning, which had historically been looked at through attitudes and other social-psychological aspects of learning. The paper seeks to provide a basis for a research agenda on how motivation is used in second-language learning. No information is provided in the abstract about the process by which the research agenda was developed.

Link: http://www.jrre.psu.edu/articles/v18,n1,p52-58,Harmon.pdf

Author: Hobart L. Harmon

Title: A Research Agenda for Improving Science and Mathematics

Education in Rural

Schools

Publication/Source: Journal of Research in Rural Education

Year: 2003

About: This paper is the outcome of a conference funded by the National Science Foundation. The conference brought together 47 participants, including funders, policymakers, educators, and researchers, to identify research questions that were grouped into seven categories outlined in the paper. The research agenda was disseminated through this publication.

Link: http://www.insidehighered.com/advice/mentor/reedy

Author: Justin Reedy and Madhavi Murty

Title: Creating a Research Agenda Publication/Source: Inside Higher Ed

Year: 2009

About: This is a how-to blog post on creating a research agenda for an individual graduate student (rather than a broad research agenda for a

field or discipline).



