

Practice- and Research-Informed Strategies to Cultivate an Inclusive STEM Ecosystem

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Envisioning an Inclusive STEM Ecosystem

Composed of professionally and culturally diverse partners

(Powell, 2018; Craig-Henderson, 2018)

Committed to long-term, joint efforts towards realization of mutually-defined goals (Coburn et al., 2013; Penuel & Gallagher, 2017)

Challenges hegemony of uni-directional flow of knowledge (Boyer, 1996; Peters et al., 2005; Nicotera et al., 2012)

Recognizes and makes effort to eliminate bias in social relations (AEA, 2011)

Employs epistemologies, methods, and theories that are congruent with vision of an inclusive STEM ecosystem (Creswell & Poth, 2018)



Example of an Inclusive STEM Ecosystem

Secondary School Field Research Program, LDEO (2005-Present)

Efficient and Effective Use of Federal STEM Funds

(Mervis, 2013; White House, 2014)

Research Use (Stewart et al., 2012; Penuel et al., 2017; Schneider, 2018)

Broader Impacts

(NABI, 2016; ARIS, 2019; NSF, 2019)

Diversity and Inclusion in STEM

(NRC, 2012; Bernard & Cooperdock, 2018; NCSCS, 2019)

Fostering STEM Ecosystems

(White House, 2018)

Relevant Concerns





The Power and Possibilities for the Public Good When Researchers and Organizational Stakeholders Collaborate

President: Vanessa Siddle Walker Program Co-Chairs: Sheryl J. Croft and Michelle A. Purdy

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The 2020 theme calls upon us as education researchers to situate our annual convening at the crossroads of deliberate reconnection. Informed and inspired by a "future-oriented historiography" (Kelley, 2018) of our past, we will intentionally come together with stakeholders representing a variety of educational organizations to expand our platform for research, practice, and policy. For over 50 years, AERA has been structurally disconnected from the educational communities about whom we write. The time has come for AERA to reclaim the historic possibilities of connectivity and collaboration in educational problem solving and to include organizational stakeholders, both national and local, as full participants in the Annual Meeting.





science + education collaboratory

ADVANCING COHERENT AND EQUITABLE SYSTEMS OF SCIENCE EDUCATION









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