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Award Abstract #1612824

**Research on an International
Network for STEM Media Making
and Student-Led Participatory
Teaching**

ABSTRACT

This Research in Service to Practice project, a collaboration of Pepperdine University and the New York Hall of Science, will establish a network of STEM-related Media Making Clubs comprised of after-school students aged 12 - 19 and teachers in the U.S. and in three other countries: Kenya, Namibia and Finland. The media produced by the students may include a range of formats such as videos, short subject films, games, computer programs and specialized applications like interactive books. The content of the media produced by the students will focus on the illustration and teaching of STEM topics, where the shared media is intended to help other students become enthused about and learn the science. This proposal builds on the principal investigator's previous work on localized media clubs by now creating an international network in which after-school students and teachers will collaborate at a distance with other clubs.

The central research questions for the project pertain to three themes at the intersection of learning, culture and collaboration: the impact of participatory teaching, virtual networks, and intercultural, global competence. The research will combine qualitative, cross-cultural and big data methods. Critical to the innovation of the project, the research team will also develop a network assessment tool, adapting epistemic network analysis methods to the needs of this initiative.

This work is funded by the Advancing Informal STEM Learning (AISL) program, which seeks to advance new approaches to, and evidence-based understanding of, the design and development of STEM learning in informal environments.

NSF Org: [DRL](#)
[Division Of Research On Learning](#)

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Program Manager: Alphonse T. DeSena
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Sponsor: Pepperdine University
24255 Pacific Coast Hwy
Malibu, CA 90263-4819 (310) 506-4819

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