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Front Matter

Journal of Pre-College Engineering Education Research (J-PEER)

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About this Journal

The graduates of today and tomorrow enter into a world that requires them to be engineering-literate and technologically savvy. The integration of engineering education in grades P-12 will better arm students with essential tools and skills to enter into the workforce or postsecondary education. Additionally, due to a 20 percent slip in the number of engineers graduating from U.S. institutions and with more than half of the U.S. workforce in the sciences and engineering approaching retirement age, the need for a diverse group of students interested in and prepared to study engineering in college is ever growing.

It is essential that young engineers from the U.S. be involved in the next generation of innovative ideas that support our society's needs. This interest and drive to participate in engineering must be fostered at an early age. The *Journal of Pre-College Engineering Education Research (J-PEER)* is dedicated to addressing the downward trends in engineering interest, preparedness, and representation; to transforming P-12 education to include engineering; to preparing a globally competitive engineering workforce; and ultimately to creating a society of engineering-literate citizens.

J-PEER is issued twice a year electronically and serves as a forum and a community space for the publication of research and evaluation reports on areas of pre-college STEM education, particularly in engineering.

J-PEER targets scholars and practitioners in the new and expanding field of pre-college engineering education. This journal invites authors to submit their original and unpublished work in the form of (1) research papers or (2) shorter practitioners reports in numerous areas of STEM education with a special emphasis on cross-disciplinary STEM approaches incorporating engineering.

Broadly the topics include but are not limited to research articles on elementary and secondary students learning, curricular and extracurricular approaches to teaching engineering in elementary and secondary school, professional development of teachers and other school professionals, comparative approaches to curriculum and professional development in engineering education, parents' attitudes toward engineering, and the learning of engineering in informal settings.

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Submitted articles cannot have been previously published, nor be forthcoming in an archival journal or book (print or electronic). Please note: "publication" in a working-paper series does *not* constitute prior publication. In addition, by submitting material to *Journal of Pre-College Engineering Education Research (J-PEER)*, the author is stipulating that the material is not currently under review at another journal (electronic or print) and that he or she will not submit the material to another journal (electronic or print) until the completion of the editorial decision process at *Journal of Pre-College Engineering Education Research (J-PEER)*. If you have concerns about the submission terms for *Journal of Pre-College Engineering Education Research (J-PEER)*, please contact Maria Granic-White at mgranicw@purdue.edu.

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It is understood that the current state of technology of Adobe's Portable Document Format (PDF) is such that there are no, and can be no, guarantees that documents in PDF will work perfectly with all possible hardware and software configurations that readers may have.

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