Impact of Experiment-Centric Pedagogy demonstrated through technical writings, conferences, and publications.

The use of experiment-centric pedagogy in STEM education has shown to have a positive impact on students' ability to think critically, to be motivated, and to feel competent. Numerous published publications displaying improved student outcomes are the result of a multi-year examination into the benefits of inquiry-based, hands-on learning strategies at the undergraduate level. 21 publications from conferences, and symposiums communicated the research results and program impacts. These studies demonstrate how students in engineering, physics, mathematics, chemistry, biology, and other technical fields learn more effectively and with greater confidence when they are exposed to practical, hands-on lessons. The following articles go into more detail about how experiment-based curricula affect students' capacity for problem-solving, interest in STEM fields, and self-confidence. The study's main finding is that active, lab-based teaching strategies are important for fostering critical thinking abilities, intrinsic drive, and self-efficacy in the next generation of STEM workers.

The research findings and program outcomes have been disseminated through 21 articles [1-21]. Papers can be obtained from the link below:

https://drive.google.com/drive/u/0/folders/1LhgDDH-OI8yVLqff5I_4B0mmBnMS_Tus

Articles for the Work


https://tinyurl.com/ImpactofECP