Embedding Entrepreneurial Thinking into Fluids-related Courses: Small Changes Lead to Positive Results

MARIA-ISABEL CARNASCIALI, University of New Haven — Many fluid dynamics instructors have embraced student-centered learning pedagogies (Active & Collaborative Learning (ACL) and Problem/Project Based Learning (PBL)) to promote learning and increase student engagement. A growing effort in engineering education calls to equip students with entrepreneurial skills needed to drive innovation. The Kern Entrepreneurial Engineering Network (KEEN) defines entrepreneurial mindset based on three key attributes: curiosity, connections, and creating value. Elements of ACL and PBL have been used to embed Entrepreneurial Thinking concepts into two fluids-related subjects: 1) an introductory thermal-fluid systems course, and 2) thermo-fluids laboratory. Assessment of students’ work reveal an improvement in student learning. Course Evaluations and Surveys indicate an increased perceived-value of course content.

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