

Scaling Elements of a Competency-Based Hybrid Instructional Model into Advanced Manufacturing Courses

Goal(s):

1. Provide a more accessible method of instruction in advanced manufacturing courses, to remove barriers for existing and potential college students.
2. Improve the skill level of students in advanced manufacturing courses through a competency-based learning model.
3. Increase the knowledge of implementing a competency-based hybrid instructional model for advanced manufacturing courses in the NSF-ATE community.

Objectives:

Objective 1: Improve the effectiveness and access of advanced manufacturing courses at four partner colleges using a Networked Improvement Community process to implement curricular changes.

Objective 2: Demonstrate the conversion of two traditional advanced manufacturing courses to a competency-based hybrid instructional model, based on the technical competencies required by the industry partners.

Objective 3: Develop the knowledge and skills for 90 technical faculty to scale elements of a competency-based hybrid instructional model into advanced manufacturing courses at their college.