

Active Learning Artifacts as Catalysts for Peer Interaction and Classroom Community

Abstract

This poster explores how student-created artifacts—**projects students design, build, and keep**—function as focal points for peer discussion, reflection, and shared learning.

Active learning techniques or methods such as peer instruction and collaborative making enhance engagement, yet their role in fostering classroom community is less frequently examined.

Objective

- Investigate student perception of their experience in developing creativity, problem solving, soft-skills, and communication given curriculum that employs community-based learning, projects, and a collaborative assignment approach.

References

Spike, N., Slupe, G., & Dietsche, K. (2026, June). *Artifacts of learning: The polytechnic experience*. In *Proceedings of the 2026 ASEE Annual Conference & Exposition*. American Society for Engineering Education.

<https://peer.asee.org/>



Methodology

- Likert-scale surveys across three semesters
- Measures of interest, coursework intent, and career relevance
- Phenomenological interviews with university instructors
- Thematic analysis of lived teaching and learning experiences



Artifacts of Learning – “objects which students keep, using industrial equipment and processes.” (Spike, et al. 2026).

Findings/Barriers/Strategies

Insights from Interviews

Student-created artifacts:

- Connect learning to future career pathways.
- Serve as tangible evidence of competence and growth.
- Promote confidence, problem-solving, and persistence.
- Help students transition from “**course-taker**” to “**designer/problem-solver**.”
- Support vocational identity development through authentic, meaningful work.

Barriers:

- Time constraints
- Uneven participation
- Assessment concerns

Strategies:

- Scaffolded milestones
- Structured peer feedback
- Reflective prompts

The Artifact Impact

Artifacts as a Community Builder within the classroom

- Shared reference points for discussion
- Normalize iteration and failure
- Encourage collaboration and critique
- Extend learning beyond the classroom