

Problem-Based Learning in Robotics Central Ohio Middle School Educators

Battelle Innovation in Teaching 2019 Cohort 1
Professional Development Fellowship Opportunity

Available **Summer 2019** – A combo course – Online **P3: Applied** course with a Hands-On Workshop
Create engaging Robotics Design Challenges
Collaborate • Connect • Create with other Educators in Central Ohio
Don't Miss this Opportunity! Be one of 25 selected Fellows

Learn how to apply Design Thinking processes to create design challenges with activities tailored to the needs of your students, solving a real world issue and creating shareable products.



Online PD - P3 Applied - June 2019

- Learn the processes of Design Thinking and **P3** Problems, Projects, Products – in an easy self-paced way
- Participate in 3 live, virtual discussion classes
- Explore podcasts, videos and discussion forum at your own pace

On Site Workshop - Test Drive Activities

- Immersive Saturday (9am - 1pm)
- Middle School- **Robotics** - **June 22, 2019**
- Receive two \$50 gift cards for supplies



Concierge Support & Web Platform

- One-on-One ongoing support while you implement (August thru December)
- Basecamp web-based project platform

Wrap Up Virtual Discussion

- Wrap Up Virtual Discussions to share outcomes & discuss future design
- Upon completion awarded 3 CEUs.

Registration Opens April 15:

<https://www.pastfoundation.org/battelle-it-2019-middle-school>

For questions contact p3@pastfoundation.org

Value of Fellowship \$1,350



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PAST FOUNDATION

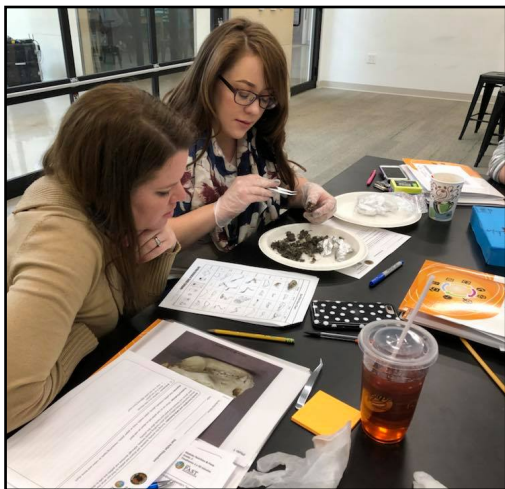
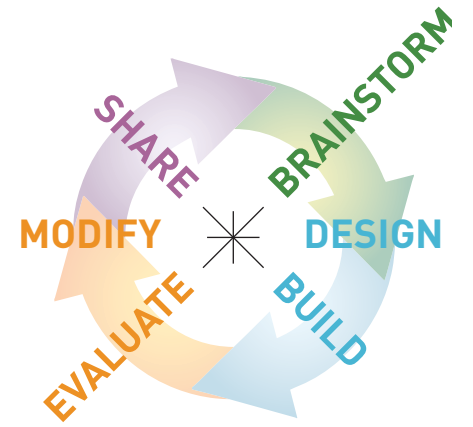
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It can be done

Transdisciplinary Problem-Based Learning (TPBL)

Problem-based Learning is the foundation of STEM employing real world issues to drive instruction and inquiry. Problem-based instructional strategies depend on hands-on projects or activities to create immersive learning as the delivery strategy. By employing real world issues as the instructional driver, problem-based learning provides cultural relevance. Viewing each and every problem holistically, empowers a transdisciplinary delivery to problem-based instructional strategies. PAST Foundation builds student programs and educator professional development that is transdisciplinary in scope, problem-based by design, culturally relevant, and delivered through engaging and rigorous TPBL modules that follow the components and sequence of Design Thinking.

P3 — Problems, Projects, Products is a transdisciplinary problem-based learning (TPBL) instructional strategy that is process-driven via the elements of Design Thinking. PAST has developed a suite of online courses for designing and implementing 21st century education. The step-by-step process helps instructors and community partners build robust and sustainable practices that engage and excite learners of every age. Taking theory to practice, P3 courses help educators deliver robust and effective TPBL units, strengthening community, business and industry partnerships.



P3 Applied & Immersive Workshop

P3 Applied is a combination online and workshop course focused on learning through a specific content lens. The course uses an adaptive curriculum development approach blending select activities, and technologies to address a real world issue. Online teachers explore a given topic through the principles of Design Thinking and then attend an immersive workshop to gain hands-on experience of the activities and technologies. **P3 Applied** is a great way to create design challenges, bridge programs, after school programs.

Workshop Details

Robotics activities focus on connection between coding and action that guide robots or fashion exploring associated concepts in technology. The activities are paired with open source software and Arduino technology aligned to 6th through 8th grade standards.

