

Ohio STEM/STEAM Lab Teacher Professional Learning Community, Bringing High Quality Professional Development Across the River

63% of Ohio 8th graders do hands-on activities or investigations once a week in science, which is 12% lower than the national average. Only 10% of Ohio 8th graders have a teacher who discuss the kinds of problems engineers solve at least once a week.

Studies show the more time students spent engaged in STEM in the classroom, the more likely they are to choose advanced math and science courses in high school, and go on to pursue a STEM career or STEM major in college.

The Ohio STEM/STEAM Lab Teacher Professional Learning Community (PLC) was launched in partnership with the [Greater Cincinnati STEM Collaborative](#) (GCSC) and Northern Kentucky University's [Center for Integrative Natural Science and Mathematics](#) (CINSAM) to advance teachers' skills, experience, and confidence in leading engaged student learning in STEM, modeled after CINSAM's [Next Generation STEM Classroom](#).



The Ohio STEM/STEAM Lab Teacher PLC served over 30 teachers in 2018-2019 from 6 southwest Ohio school districts, including Cincinnati Public Schools, the largest school district in our region.

The teachers met four times over the course of the school year to participate in a "Fishbowl" lesson, facilitated by a master teacher in their classroom, allowing PLC teachers to see a lesson in real time. Afterwards, the teachers engaged in a RECAP (Reflection, Exploration of Content, Alignment, and Pedagogy) session where they discussed the best practices they observed and how it can be translated to their teaching and classroom.

What did all this learning and experience mean for teachers that participated? What did they gain?

"This cohort has not only given me opportunities to learn motivational and engaging strategies, but I have been given the opportunity to collaborate with my peers. The resources I have gained through my colleagues have been invaluable" - Robyn White, Cincinnati Public Schools

On March 6th, the PLC culminated at the University of Cincinnati where teachers shared lessons they created using pedagogies they learned. The PLC was ongoing and interconnected professional development which allowed teachers to engage in lessons with their peers and receive a large set of STEM resources, including a multi-district network of colleagues to learn from and collaborate with.



The lasting influence of the PLC is teachers who feel more confident in teaching STEM and incorporate it more in their classrooms, this directly affects the 25 – 100 students a teacher will impact during the school year.

"I feel like this work is beneficial to our students because it provides me with a network of teachers who have fresh STEM ideas. I hope by incorporating more STEM in my class that my students are inspired to pursue careers in science or math with confidence - Natalie Piening, Norwood City Schools

What Happens Next?

The Ohio STEM/STEAM Lab Teacher PLC has received a generous second round of funding from the [Martha Holden Jennings Foundation](#) for the 2019-2020 school year! GCSC will share more information about the second cohort and how you can join in the coming weeks.