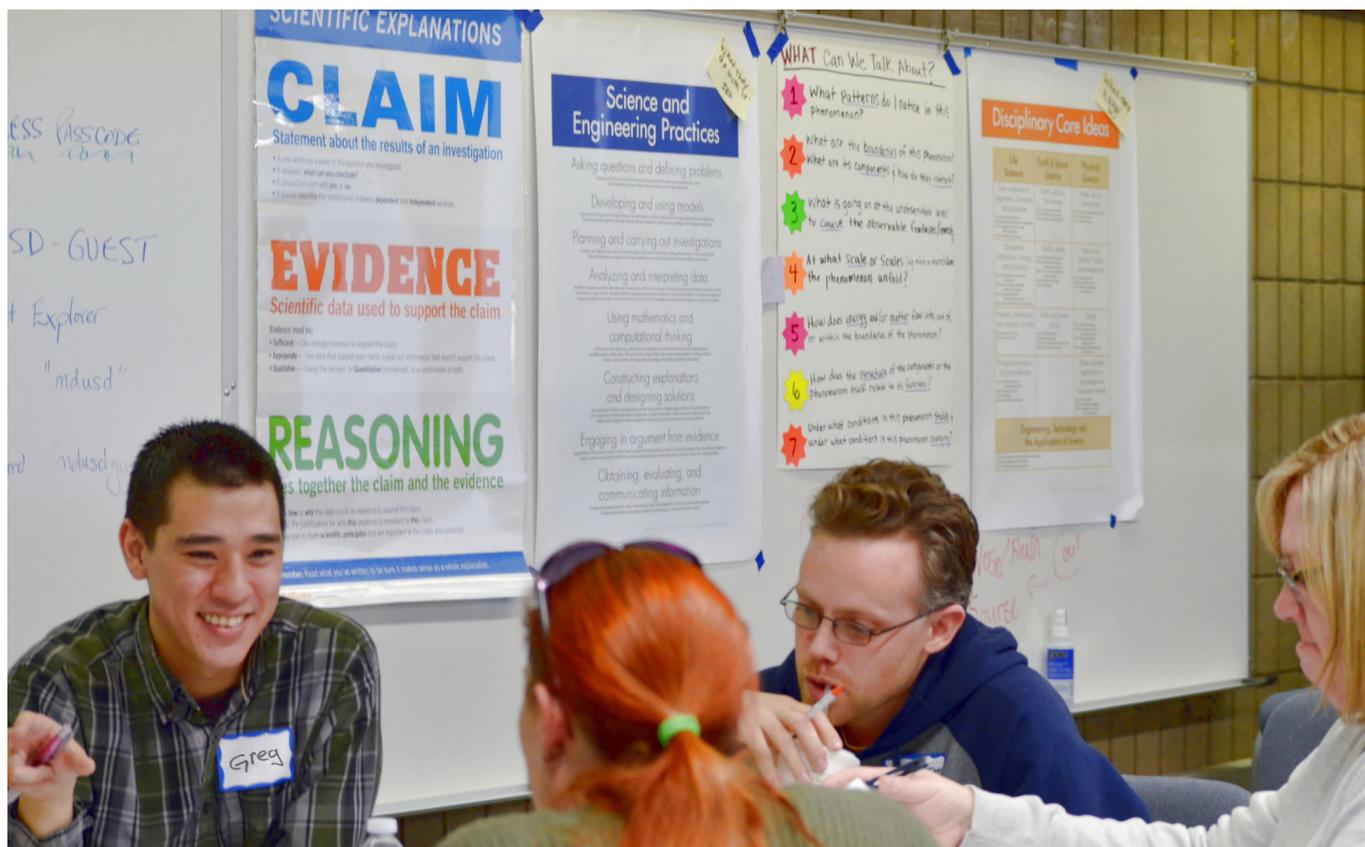


Activate Learning Professional Development Program

Why PD?

The *Framework for K-12 Science Education* outlines an ambitious future for science education, but it only describes what students are expected to know and do by the end of a grade band—not how teachers are to support them pedagogically to meet those goals. Activate Learning supports educators by providing several opportunities for teachers to experience a three-dimensional curriculum, to understand how the curriculum design works, and to analyze an array of instructional practices that foster meaningful student engagement with science.



What We Offer

Activate Learning offers professional development support that we categorize based on goals for teacher learning. Introductory PD is required prior to implementing the curriculum. In that session, teachers use the materials, experience lessons, and make sense of the curricular and instructional components. Once educators begin teaching the curriculum, we offer two additional options for ongoing support: Content-based PD designed to engage teachers in the practices and core ideas of a chosen unit prior to implementation, and Classroom-based PD designed to engage teachers with student work during a unit in order to support future instructional decision-making around formative assessment.

Introductory PD

This initial two-day PD introduces educators who are new to our curriculum to its scope and design prior to implementing the curriculum in their classrooms. Teachers experience an opening sequence of activities as learners, then they reflect on aspects of their experience that made the lesson meaningful. We then introduce our core research-based design principles as a reflection tool teachers use to analyze their experience. Finally, teachers set up and engage in several follow-up activities, identify and unpack the complexities of those activities, and develop a plan to approach these ideas and practices with students.

Content-based PD

Helpful for all teachers, but particularly for those teaching new content, Content-based PD engages educators in an in-depth examination of the science concepts addressed in a unit, and the sequence of activities that supports students in building conceptual understanding over time. Educators set up and engage in several activities, identify and unpack the complexities of those activities, and develop a plan to approach these ideas and practices with students. The sequence of activities that teachers experience is chosen to emphasize coherence—the process of building and applying big science ideas over time.

Option #1: Unit-specific session **Option #2: Mixed-grades session**

Classroom-based PD

In Classroom-based PD, teachers collect and collaboratively analyze student work - including classroom discourse - in order to assess student thinking and determine how to adapt future instruction. Both options below focus teacher thinking around student thinking through classroom artifacts such as group models and written CER explanations. Option #1 requires educators to bring this student work into a session whereas option #2 situates sessions on-site, thus allowing participants to gather first-hand student data from classroom observation to analyze afterwards.

Option #1: One day-long session per unit **Option #2: One session per unit to take place after classroom observation(s)**

Activate Learning is a leading publisher of investigation-centered, K-8 science curricula. Active Science is a hands-on, K-5 program whose activities, discussions, and investigations, using a 5Es model, develop problem-solving and communication skills across content areas. IQWST™ (Investigating & Questioning our World Through Science & Technology) is a rigorous, 6-8 science curriculum designed to challenge and support students as they investigate questions, engage in scientific practices, and use evidence to explain scientific phenomena.



IQWST was developed through grant funding from the National Science Foundation (NSF), Grants 0101780 and 0439352 to the University of Michigan and Grant 0439493 to Northwestern University. IQWST is available in print or as a fully Interactive Digital Edition.