



2018 Learning Pathway Details

Addressing New Standards through Curriculum and Professional Development

BSCS Science Learning

Join BSCS Science Learning and learn to use NextGen TIME (Toolkit for Instructional Materials Evaluation), a suite of tools and processes supporting the evaluation, selection, and implementation of instructional materials designed for next generation science. Educators in states, districts, and schools need a deep understanding of the NGSS to select quality instructional materials, plan for implementation of those materials, and provide professional learning that enables teachers to effectively implement NGSS-aligned teaching and learning. Given the shifts in teaching and learning called for by the Framework for K-12 Science Education and the NGSS, educators benefit from the practical approach to professional learning offered through engagement in the five phases of NextGen TIME—Prepare, Prescreen, Paperscreen, Pilot, and Plan.

Collaboratively using the tools and processes of NextGen TIME represents professional learning focused on instructional materials and their design for next generation science. Through this pathway, you'll experience selected components of the NextGen TIME and then plan to use this suite of resources in your context—whether you plan to select and implement a new, year-long science program or need to analyze existing instructional materials and develop a plan to improve their quality. All resources needed to learn and use NextGen TIME are freely available.

Block 1:

Along with an overview of NextGen TIME, in this first block, you'll assess the current state of your district and teachers for the use of instructional materials designed for next generation science by using one of the tools from the Prepare Phase of NextGen TIME. This tool from the Prepare phase helps users assess practice related to three-dimensional phenomenon/problem driven teaching and learning among their teachers and readiness to support the effective use of instructional materials in classrooms throughout the district.

Block 2:

In block 2, we'll begin to evaluate a unit of instruction using tools and processes from the Paperscreen phased on NextGen TIME. You'll read from a unit of instruction, *Disruptions in Ecosystems*, and begin to apply the Paperscreen tools and processes to gather evidence based on key criteria of high-quality instructional materials designed for next generation science. Evidence is represented visually to promote collaborate analysis of the instructional materials.

Block 3:

In block 3, you'll continue to evaluate the *Disruptions* unit using the first rubric in the Paperscreen phase of NextGen TIME based on criteria including presence of phenomena or problems, presence of three dimensions of the NGSS, and presence of a logical sequence of ideas and practices. Users begin to collaboratively score the quality of the materials and identify strengths and limitations using the rubric and consensus-building strategies.

Block 4:

In block 4, you'll complete the scoring process from the first rubric (if needed) and begin to dig more deeply into the *Disruptions* unit to evaluate the quality of student learning experiences and how well the



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materials represent three dimensional, phenomena or problem driven teaching and learning. Users gather and visually represent evidence about the pathway of student thinking and begin to consider how well the materials help access and engage students' prior knowledge, help them develop a conceptual framework based on the use of phenomena or problems and all three dimensions, and make the learning accessible to all students.

Block 5:

In the final block, we'll introduce the resources available as part of the NextGen TIME suite of tools and processes through a vignette that tells the story of one district's experience. You'll have an opportunity to explore the resources and discuss their usefulness in your context. All resources for NextGen TIME are freely available on our website and were developed collaboratively by BSCS Science Learning, Achieve, Inc., and the K-12 Alliance at WestEd with support from the Carnegie Corporation of New York.