Next Generation Science Exemplar System (NGSX)
Science Professional Learning Opportunities for MA Educators¹
Winter-Spring-Summer 2023

- Courses are offered at no charge to eligible MA educators.
- Stipends and PDPs are available for all courses. See course-specific information for details.

Becoming a Next-Gen Science Teacher (or BNGST)

Becoming a Next-Gen Science Teacher (BNGST) prepares teachers to engage their students in the core science practices of modeling, argument, and explanation about puzzling phenomena in the world around them. Participants learn how to build a classroom culture for robust sensemaking, student agency, and equitable participation. Through collaboration in doing science and exploring rich video cases, participants gain a variety of tools and resources to take back to their classrooms – to learn with and from their students. This course is highly interactive and collaborative, and it centers equity and agency for students and teachers.

- **Target audience:** PreK-12 teachers, STEM coaches, science department chairs, district science leaders, informal science educators
- **Dates:** August 15-18, 2023 (45 PDPs)
- **Location:** in person, Clark University, Worcester MA
- **Stipend:** $300
- [Learn more and register here](#) – early access Jan 15, regular access Jan 18

Virtual-Becoming a Next-Gen Science Teacher (V-BNGST)

The fully virtual version of BNGST, **Virtual Becoming a Next Gen Science Teacher (V-BNGST)** is as collaborative and interactive as its in-person counterpart. As in the in-person pathway, teachers are immersed in doing science as adult learners for portions of the session. Science materials are sent directly to participants. (See BNGST above for more information.)

- **Target audience:** PreK-12 Teachers of science, STEM coaches, district science leaders, informal science educators
- **Dates:** June 26-28, plus August 21-23, 2023 (45 PDPs)
- **Format:** Virtual, synchronous facilitated study groups.
- **Stipend:** $450
- [Learn more and register here](#) – early access Jan 15, regular access Jan 18

¹ These courses are Approved Courses for Accelerating Science: Open Access Professional Learning (OAPL). Eligible Massachusetts educators may take these courses at no cost. Visit [OAPL website](#) to learn more.
PLANS: Principals Learn and Network for Science

The PLANS course is professional learning for principals, curriculum supervisors, coaches, teacher leaders, and district science leaders. It introduces instructional leaders to the new vision for science teaching and learning – as set forth in NGSS and in the MA Frameworks. PLANS is a 1.5-day highly collegial and interactive experience. Participants build their understanding of the essential elements of “Next Gen Science” teaching and learning, and what teachers will need in order to make this new vision a reality for all students.

- **Target audience:** Principals, curriculum supervisors, coaches, teacher leaders, and district science leaders. This pathway is designed for administrators, but teachers are welcome to join.

- **Dates:** There are two options to choose from. Each option is Friday afternoon plus a full day Saturday. 11 PDPs offered.
  - **Option 1:** March 10 - 11
  - **Option 2:** April 28-29
  - (Feb 10-11 course postponed)

- **Location:** in person, Clark University, Worcester MA

- **Stipend:** $150

- [Learn more and register here for March cohort](#) [Register here for April cohort](#)

Oceans, Climate Science, and Big Data (OCSBD)

The Oceans, Climate Science, and Big Data Pathway supports middle and secondary teachers, instructional coaches, curriculum supervisors and administrators in growing their knowledge about oceans and big data as part of climate science. The course promotes data literacy – the use of big data sets and visualization tools – which helps scientists, educators, and students understand the extraordinary interactions between oceans and climate. Participants are introduced to CODAP and Ventusky, tools that scientists use in collecting, analyzing, and interpreting ocean data. Teachers can use many of these tools in their classrooms, to build students’ data literacy and understanding of major climate issues. Participants will work in small groups to develop initial ideas for an instructional unit on oceans and climate for their students.

- **Target audience:** Middle and High School Teachers, Administrators, STEM or science coaches and informal science educators

- **Dates:** June 19-22, 2023 (45 PDPs)

- **Format:** Virtual, synchronous facilitated study groups.

- [Learn more and register here](#) – early access Jan 15, regular access Jan 18

**Eligibility**

- Eligible Massachusetts educators may take these courses at no cost. Specifically, these courses are open to any currently-employed Massachusetts public and charter school educator whose work relates to science in grades PK-12. This includes general education teachers, special education teachers, ESL or language support teachers, principals, coaches, and other school or district administrators whose work
relates to science.

Stipends and PDPs
- Stipends and PDPs will be awarded upon course completion*.
- Amount of stipends and number of PDPs varies by course. Please see course-specific information.

*Course Completion Requirements:
- Per DESE guidance, course completion requires that participants:
  1. Attend and participate in course sessions
  2. Complete brief pre & post assessments
  3. Complete brief DESE-created end of course survey
- **Note:** Only participants who meet these requirements will be eligible for PDP certificates and stipends.

Graduate credit:
- These courses will not be offered for graduate credit.

Early Access
- Per DESE guidelines, a 3-day registration priority (Jan 15-17) is given to educators in priority districts and/or on emergency licenses. After this time (starting Jan 18), all eligible educators may register.

Early Access Eligibility: Educators who meet **either** of the two criteria below are eligible for Early Access. 1. Educators who hold an **emergency license** and are currently employed in one or more of the following fields: Early Childhood, Elementary, Moderate Disabilities, Biology, Chemistry, Earth & Space Science, General Science, MS Math/Science, Physics, and Technology/Engineering. 2. Registration priority is **also** given to educators from the following school districts:

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For more information about these courses, email nextgenexemplar@gmail.com.