



Science Preparations for the 2020-21 School Year

The documents referred to are in the [Science Preparations Resources Folder](#) and will soon be on the Minnesota Department of Education (MDE) [Science webpage](#).

Current Status and Implementation of the 2019 Science Standards

Rulemaking: The Commissioner of Education approved the draft of the Science Standards prepared by the standards review committee in May with the recommendation that schools and districts use these in planning for full implementation by 2023-24. The standards become legally binding through Minnesota's rulemaking process, which involves making the case to an Administrative Law Judge that the standards are necessary and reasonable. We are working on the documentation for that process. The process could take until the end of the school year. You can learn more and keep up with progress at the [MDE Science Rulemaking webpage](#).

Timeline for implementation: In consultation with many district leaders we developed a potential implementation timeline that lays out a schedule of professional development, curriculum planning, and beginning to teach the new standards over the schools years leading up to full implementation in 2023-24. This document is in the [Resources Folder](#). According to that plan, schools might start teaching the new standards at some grades starting in 2021-22 and add grades over the following two years.

With the demands of the pandemic, some people suggested that implementation of the new standards be delayed. However, that would cause conflicts with the scheduled implementation of new English Language Arts standards also in 2024-25. Districts and charter schools may set their own implementation timeline for the new science standards. We have prepared a document of alternative implementation timelines, which compare the phasing-in of teaching the new standards over three years, over two years, or all at once. That document is in the [Resources Folder](#).

We encourage districts and schools to support their teachers in learning more about the pedagogy associated with the new standards and incorporating the Science and Engineering Practices and phenomena-based instruction in their current teaching of the 2009 standards in both in-person and distance learning environments.

Licensure: MDE and PELSB (Professional Education and Licensing Board) have prepared a joint statement on the current science licenses, the methods to add license area, and the opportunity for out-of-field permissions. This is in the Resources Folder. PELSB will consider changes in licensure rules after the science standards complete rulemaking.

Resources for Science Distance and In-school Instruction

The MDE [Guidance for Minnesota Public Schools: 2020-21 School Year Planning](#) and the Minnesota Department of Health [2020-21 Planning Guide for Schools](#) are the primary documents for safety, health, and instructional practices. They supersede any advice from other sources. MDE has posted instruction guidance for distance learning, include science guidance at the [Student Instruction COVID – 19 Resources](#) page (click on the Academic Standards Support expansion bar).

The Council of State Science Supervisors (CS³) developed support documents for science learning during distance learning and return to school, including advice for science leaders, teachers, families and students. Most recently, they published [back-to-school guidance briefs](#) on instruction, assessment, curriculum, well-being and safety. They also produced a very helpful and practical [recorded lab safety webinar](#) by NSTA science safety consultant Ken Roy.

The National Science Teaching Association (NSTA) has a [Safety Resources](#) landing page with laboratory and investigation safety practices for both in-school and at-home. They also have up-coming and archived [web seminars](#) on many instructional topics including one on Lab Safety on August 31.

The Minnesota Science Teachers Assn. (MnSTA) has a site where teachers can upload lesson plans to share and can access those that are posted. To view the lessons and to contribute go to the [MnSTA Resources for Teaching Remotely](#) webpage. You will also find other resources posted there, including suggestions for elementary teachers and links for remote learning resources.

Professional Development

The MnSTA Conference on Science Education is going online November 12 – 17. There will be evening sessions on Thursday, Friday, Monday, and Tuesday, plus unconference sessions on Saturday Morning. Check the [MnSTA Conference website](#) for details, including the calls for presenters and exhibitors.

MnSTA began a series of webinars on **Science Teaching and Social Justice** in July. The series began with conversations among teachers and students working toward equity practices in science classes. The slides and resources are in the [MnSTA Equity in Science Education](#) website. Watch for future events.

The **Science and Engineering Practices in Action (SEPA)** is a set of online modules to support professional learning communities. These are great resources to learn instructional strategies to incorporate the practices of the new standards into current instruction and prepare for teaching the new standards. Instructions for accessing the MDE Online Science Courses are in the [Resources Folder](#).

District Science Leader Network: District-level staff who have responsibility for science education across their district are invited to participate in this network. Some examples are district curriculum coordinators, science coaches, TOSAs, and charter school/private school lead teachers. Meetings will be scheduled throughout the year, starting virtually. Persons in those roles who would like to receive invitations should contact john.c.olson@state.mn.us.

August 27, 2020, John Olson MDE Science Content Specialist, john.c.olson@state.mn.us