

## Maine's Science And Technology Standards Review

### An Educator's Need-to-Know Sheet

#### **1. Why are the standards in review and what does it mean to me?**

The Maine Learning Results go under review every few years. The science standards were last reviewed and revised in 2007, more than 10 years ago. The Maine Department of Education initiated this review of the standards and they need our help to understand what types of science standards will be most helpful to students. As an educator you are an expert on what works for students and you can have a significant impact on how the standards are written and implemented across the State. If you are looking to see change in the Maine Learning Results in Science this is the time to do it.

There have been a number initiatives over the past few years, including failed legislation and other initial reviews of the standards, that have started and then faded away. The standards review that is now open will NOT go away, this is the big push that will define science standards for the immediate future.

*Even if you had submitted comment or testimony over the past few months or years, please make sure you submit new or revised comments and testimony NOW during this important science standards review process. NOW is the time to make your voices heard.*

#### **2. What options do I, as an educator, administrator, or interested parent, have to share my thoughts about the standards review?**

The Department of Education NEEDS to hear your voice and WANTS to hear what you think about the current MLR science standards and what direction you think the state should head in for our science learning standards. There are a variety of ways that you can participate in this process:

1. There will be a series of in-person meetings for the department of education to solicit feedback.
2. There is currently an open public comment period that gives anyone and everyone the opportunity to submit written comments.

People wishing to speak during the in-person hearings will be asked to sign in and it will be helpful, but not mandatory, to provide a written copy of their comments.

February 27, 2018 – Cross Office Building, room 103, 111 Sewell Street, Augusta, 4-6 pm

February 28, 2018 – Houlton High School Library, 7 Bird Street, Houlton, 4-6 pm

March 1, 2018 – Westbrook Middle School Cafeteria, 471 Stroudwater St, Westbrook, 4-6 pm

Once the public comment period closes a Department of Education appointed steering committee will review all the feedback that has been given and offer revision suggestions based

on that feedback. Those suggestions will steer the writing process that will be done by the science standards writing team. A draft of the standards will then be made available for public review and comment.

### **3. What actions would be most productive for the process?**

*Here are some specific suggestions for what you can act on TODAY to make a difference in the way science will be taught in Maine:*

1. Submit a brief comment to [sis.doe@maine.gov](mailto:sis.doe@maine.gov) with the subject "Science Standards Review" before March 16<sup>th</sup>.
2. Attend one of the in-person hearings and provide spoken comment and send a digital copy of your statement to the Department of Education.
3. Show up at an in-person hearing and share some stories about what your students need and what you think will be the right direction for Maine's science education.
4. Gather your science department and administrator together and draft a joint statement that you submit to the department of education by March 16<sup>th</sup>.
5. Send out a note in your school newsletter to parents that the Maine Department of Education is looking for public comment on the science standards and ask them to share their views.
6. Use social media to get the word out and ask your friends and colleagues to submit comments or attend the regional meetings.
7. Share this educator need-to-know document with the membership of the professional organizations you participate in and ask the organization to take a stand and submit comments to the Department by March 16<sup>th</sup>.
8. Ask to speak to your school board and offer to draft comments to be approved by and submitted by the school board.

**Written comments may be emailed to [sis.doe@maine.gov](mailto:sis.doe@maine.gov) with the subject "Science Standards Review" or mailed to Maine Department of Education, attn: Paul Hambleton, 23 State House Station, Augusta, ME 04333.**

### **4. How do the NGSS fit into Maine science teaching right now?**

At this point in time the NGSS are not part of the Maine science standards, the Maine Learning Results (MLR). More than 75% of districts across the State of Maine have adopted the Next Generation Science Standards (NGSS) locally either through official school board approval or in practice in classrooms with approval from administrators - but the State standards are still the same as they were back in 2007. Many districts have already adopted the NGSS as their high school graduation standards and as such are directing professional development dollars toward NGSS implementation. Local dollars, time, and effort have already gone into moving toward a future where students learn to "do science". It is clear, that the momentum in the State of local schools, parents, and educators is committed to giving our students the opportunities for learning that the NGSS provides.

Maine chose to participate in the initial development of the NGSS thanks to a stakeholder process that the state participated in 2011. The NGSS as written today include a great deal of input from Maine educators and administrators thanks to this process. This was a state led process that was funded by private foundations; there were zero federal dollars devote to this effort.

The NGSS are a research-based set of 3-dimensional (including crosscutting concepts, core disciplinary ideas, and scientific and engineering practices) standards that are meant to help students experience what the process of “doing science” is really like. Students progressively learn how to reason with evidence, go public with their ideas and explanations, and engage in modeling their explanations. It helps students understand that science is much more than a set of facts or one distinctive approach common to all science, a single "scientific method"; it is figuring out how science uses many methods. It is only through engagement in the practices of science that students can recognize how such knowledge comes about and why some parts of scientific theory are firmly established and others are not.

#### **5. When submitting comments what format should the statement be in?**

There is no formal structure or format, but here are some suggestions to help you get started.

State your name, town of residence, and profession. If you are currently a teacher, administrator, or school board members, say so, and for how long - it will increase your credibility. If you would like, you can state your employer, but it is not mandatory.

Here are a few suggestions of what you could discuss in your comments:

- Please provide some anecdotes or stories about your students and/or school community to illustrate what good science education is and the need for rigorous standards.
- Why do science standards matter to you?
- What do you think of the current MLR Science Standards?
- What types of science standards is your school working under?
- Have you already adopted NGSS? How has it been going? How much has already been invested in time and funds for materials, pd, etc.?
- What type of science education environment do your students thrive in? What does good science education look like?
- What direction would you like the state of Maine to head in in relation to science standards?
- What standards, or types of standards, would you recommend the Department of Education look at or incorporate into the new standards?
- What supports will you need as an educator to implement science standards?

End your comments/testimony with a specific recommendation for the committee.