

Recommending New State Science Content Standards: Information for Potential Committee Members

Alaska Department of Education & Early Development
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This document provides background information on the process that will be used to recommend and adopt new science content standards for Alaska. This information is especially intended for persons interested in serving on one of the committees that will review and recommend the new science standards for adoption by the Alaska State Board of Education.

Overview

The Alaska Department of Education and Early Development (DEED) is beginning a process of reviewing and recommending state science content standards. The process will involve a number of committees and reviews. DEED intends to present the content standards to the Alaska Board of Education by winter 2018; adoption would be finalized by spring 2019. The first state assessments reflecting the new state science content standards would be administered in spring 2020.

Purpose

The primary purpose of this document is to provide essential information to persons considering serving as a committee member for the science content standards' adoption.

Roles and Responsibilities

The standards adoption process will be under the direction of the DEED. DEED will be assisted by committees of teachers and other qualified persons who will recommend and review the content standards. The Alaska Board of Education is empowered to officially adopt state content standards.

Table 1: Summary of Roles and Responsibilities

<i>Role</i>	Responsibility	Approximate Number of Members
<i>DEED</i>	Oversee standards adoption process; provide support to committees, public, and Board	n/a
<i>Science Standards Writing Committee</i>	Select, edit, organize science content standards, including responding to review comments	12-15 (4-5 per elementary/middle/high school grade span)
<i>Science Standards Review Committee</i>	Review recommended content standards	30-45 (10-15 per grade span)
<i>Public</i>	Review recommended content standards	n/a
<i>State Board of Education</i>	Approve final content standards for state adoption	n/a

DEED is responsible for overseeing and managing the standards adoption process. This includes developing the plan, recruiting committee members, paying for teacher substitute pay as appropriate, arranging and paying for meeting costs (meeting space, equipment, meals, travel, lodging, etc.). DEED will also provide support to the committees in compiling drafts and final versions of the committees' recommended standards, documenting the process, and providing support to the State Board of Education, including managing the public hearing, comments, and responses about the recommended content standards.

The Science Standards **Writing Committee** is responsible for “writing” the science content standards. Writing Committee members should have a deep understanding of science instruction and assessment, science content and skills, and applications of science knowledge and skills; be able to work independently and together in groups effectively; be precise and articulate in written English for technical topics, i.e., science content standards; and be willing and able to devote the necessary time to complete the tasks associated with the standards adoption. The Writing Committee, to the extent practicable, should represent the diversity of Alaska’s educational settings and communities.

The Writing Committee members will work individually and also meet together as a group at least three times to accomplish the following tasks:

- The Writing Committee will identify and review influential sets of science content standards (e.g., *Next Generation Science Standards*; science standards for the NAEP, PISA, and TIMSS assessments; science standards from College Board and ACT; science standards from other leading states; science standards from leading textbook publishers; past science standards such as AAAS’ *Project 2061*).
- The committee will identify, modify, write, and compile a recommended set of science content standards drawing on its members’ expertise and review of relevant materials. Ideally, the Writing Committee will produce a set of content standards to guide curriculum and instruction in the state, as well as a version to guide state summative assessment. The version to guide assessment may represent a subset of the full standards, with clarifications required to specify how the standards will be represented on the state assessment.
- Following review, the Writing Committee will make appropriate changes. The Writing Committee will send its recommended set of science content standards to DEED, which will review and send to the State Board.

The Science Standards **Review Committee** is responsible for reviewing and providing detailed feedback on the content standards recommended by the Writing Committee. Review Committee members should have a deep understanding of science instruction and assessment, science content and skills, and applications of science knowledge and skills; be able to work independently and together in groups effectively; be precise and articulate in written English for technical topics, i.e., science content standards; and be willing and able to devote the necessary time to complete the tasks associated with the standards adoption. The Review Committee should represent the diversity of Alaska’s educational settings and communities.

The Review Committee will work individually and also meet together virtually (e.g., through web-based audio/video conferencing software) to review at least two drafts of the recommended science standards, and provide written feedback, including suggested changes in wording, to the Writing Committee.

The recommended science content standards will be submitted to a **public review** in conjunction with being presented to the Alaska **State Board of Education** for approval. Public comments will be collected by DEED and given to the Writing Committee for consideration in revising the science content standards. The Review Committee will review the revised science content standards, and the final draft version of the science content standards will be presented to the State Board for approval.

Proposed Schedule

DEED will establish and manage the standards adoption process, including the schedule. The process includes four rounds of writing and review during the 2018 calendar year.

Table 2: Key Dates and Activities

Date	Activity	Description
<i>Jan. 16, 2018</i>	Begin committee recruitment	DEED disseminates information about standards adoption process and begins committee member recruitment
<i>Feb. 20, 2018</i>	Applications close for committees	Anyone who wishes to be considered for Writing or Review Committee membership must have application to DEED by this date
<i>Feb. 26, 2018</i>	Committee notification	DEED notifies Writing and Review Committee members; provides Writing Committee materials to begin work
<i>Feb. 26-Apr. 4, 2018</i>	Writing Committee works individually	Writing Committee members work individually to review science standards materials and submit recommendations to DEED
<i>Apr. 18-20, 2018</i>	Writing Committee meets together	Writing Committee meets together to draft initial recommended science standards, using individual recommendations compiled by DEED
<i>Apr. 25-May 4, 2018</i>	Review Committee reviews	Review Committee works individually to review and recommend revisions to initial recommended science standards. Review committee members will be asked to participate in a webinar prior to their review to help orient them to the work of the Writing Committee and to their review task.

Date	Activity	Description
<i>Apr. 25- May 4, 2018</i>	Wider invited review and comment	Simultaneously to the Review Committee evaluation, DEED will disseminate a draft of the Writing Committee recommendations to additional state science teachers, representatives from institutions of higher education, representatives from policy/advocacy organizations, and/or employers associated with science fields. Resources will be provided to the reviewers to orient them to the task.
<i>June 12-14, 2018</i>	Writing Committee meets together	Writing Committee meets together to draft recommended science standards for State Board consideration, considering comments and suggestions by the Review Committee and wider review compiled by DEED
<i>Sept. 2018</i>	Consideration by State Board of Education	State Board of Education, if it chooses to do so, approves version of state science content standards for public comment and review
<i>Sept.-Oct. 2018</i>	Public comment	DEED makes proposed state science content standards widely available for public comment, including through internet/web survey
<i>Oct. 18-19, 2018</i>	Writing Committee meets together	Writing Committee meets together to consider public comments compiled by DEED, and revise for penultimate version of recommended state science content standards
<i>Oct. 24-31, 2018</i>	Review Committee reviews	Review Committee works individually to review and recommend revisions to penultimate version of state science content standards
<i>Nov. 7-14, 2018</i>	Writing Committee meets together	Writing Committee works individually and as a group to write final recommended version of state science standards, considering recommendations from the Review Committee
<i>Nov. 15- Dec. 2018</i>	DEED prepares science content standards	DEED does final review, formats, prepares final recommended state science content standards for presentation to State Board for final approval
<i>Dec. 2018</i>	Consideration by State Board of Education	State Board of Education, if it chooses to do so, approves final version of state science content standards

Please note that the dates for the Writing Committee meetings are set; persons applying for the Writing Committee should ensure they are available those dates for meeting in Anchorage and/or Juneau.

It is the intent that committees meet together in Anchorage and/or Juneau on the dates indicated in the table. However, if necessary, the committees may need to meet virtually.

Support and Other Details

Those persons who are named to the Writing Committee or the Review Committee will have associated expenses paid for attending required in-person meetings, e.g., travel, lodging, and meals. If the Committee member is an educator and the district requests, DEED will reimburse the district for substitute pay. For Writing Committee members, attendance at the June 2018 in-person meeting will be paid an honorarium of \$600 for the 3-day meeting.

Committee members will be required to sign a confidentiality agreement to ensure appropriate confidentiality of the standards adoption process.

Additional Information

If you would like to apply to be a member of the Writing or Review Committee, please download the application materials that can be found at:

https://education.alaska.gov/akstandards/science/Science_Standards_Adoption_Application.docx

If you have questions about the science standards adoption process, please contact: Deborah Riddle (deborah.riddle@alaska.gov, 907-465-2892) or Bjorn Wolter (bjorn.wolter@alaska.gov, 907-465-6542).

FAQs About the Science Content Standards Adoption Process

Last updated: 1/4/18

1. Who should apply to be considered to be a member of the Writing or Review Committees?

Anyone with the qualifications described (e.g., knowledge of science content and skills, deep familiarity with science instruction and assessment, ability to work individually and in groups, able to commit the necessary time). Educators who represent the breadth of students and educational situations in Alaska, as well as those from higher education and employers who draw on students with science knowledge and skills are especially encouraged to apply, especially for the Review Committee.

2. How many members will there be on the Writing Committee and on the Review Committee?

The Writing Committee will consist of 12-15 members, 4-5 each addressing the elementary, middle, and high school grade spans. The Review Committee will consist of 30-45 members, 10-15 each addressing the elementary, middle, and high school grade spans.

3. How much time will it take to be on the Writing Committee?

Doing the work of a Writing Committee member will require substantial time. The Writing Committee will meet in-person at least 8 full days. In addition, members of the Writing Committee will need to do substantial work individually—conservatively at least 40 hours before the April 2018 meeting. The amount of time may differ from one committee member to another depending on work habits, writing speed, and familiarity with science standards materials. For example, it is expected that the *Next Generation Science Standards* (NGSS) will be one of the key documents the Writing Committee will use to inform its work. A committee member who is already deeply familiar with the NGSS will be able to complete the work more quickly than a committee member who needs to read the NGSS from scratch. Another example is that Writing Committee members will be using software that enables joint editing (such as Google Docs or OneNote)—a committee member who is familiar with such software and is fluent at using keyboards and the software will be able to work more quickly than a committee member who is less fluent.

4. What is the nature of the required confidential agreement?

It is critical in the standards adoption process for the committee members to be able to do their work as experts in science content, skills, and instruction and assessment. A confidentiality agreement that committee members will keep the content and deliberations of the committee work confidential—and not share with colleagues or others who are not members of the committees—helps preserve the integrity of the process, which does include substantial review and input opportunities. Each committee member is there because s/he possesses the necessary qualifications—if a committee member feels s/he needs to consult with someone, s/he should consult with another committee member and/or with DEED staff.

5. What are the differences between science content standards for instruction and science content standards for assessment?

The state science content standards for instruction span grades K-12 and are intended to provide guidance for what students should learn as a minimum. These content standards help inform local decisions about curriculum and instruction. In addition, the state needs to identify science content standards that will specify what may be assessed on the state’s summative science assessment. Due to the nature of summative assessments, the science content standards for assessment will typically be a subset of the instructional content standards.