

# STATE OF ALASKA

SEAN PARNELL, GOVERNOR

## Department of Education & Early Development

*Office of the Commissioner*

Goldbelt Place  
801 West Tenth Street, Suite 200  
PO Box 110500  
Juneau, Alaska 99801-1894  
(907) 465-2800  
(907) 465-4156 Fax

March 9, 2012

Alaska House Education Committee:

The House Education Committee, through Chair Alan Dick, asked the department to be prepared to discuss with the House Education Committee the proposed Alaska mathematics standards on March 12, 2012, and the proposed language arts standards on March 16, 2012. Several specific questions were posed, as referenced in the accompanying letter. I will take advantage of this opportunity to address issues raised in this letter, and deeper discussion can occur during the upcoming hearings.

Between February 2010 and November 2011 the department held eight meetings to develop the standards. Two-hundred twenty-eight people participated in those meetings. Most of the participants were educators from diverse regions across the state, as documented in an email sent to Representative Dick's staff on November 22, 2011. Twenty-eight of the individuals who participated were from non-K-12 programs, including industry, career-technical education programs and universities. Many people from industry were invited, and approximately ten industry and career-technical training stakeholders participated.

As requested, I am enclosing in this letter as one of the attachments a document, previously provided to Representative Dick's staff, which outlines who participated in the development of these standards during the eight meetings conducted by the department. This listing provides the name, affiliation, and home city of each participant. I have not provided contact information, however, as I did not seek their permission to do so when they agreed to serve.

In December the State Board, at their quarterly meeting, reviewed the standards and voted to put them out for public comment until May 2012. During the period of public comment the department has deployed multiple strategies to seek additional comment from stakeholders, including holding webinars about the standards. The department will have conducted six webinars each on the mathematics and language arts standards prior to April 17. The department will host meetings seeking input from industry in different regions of the state, including one via audio/webinar to allow for people to participate regardless of location. In June the State Board will review the entirety of the written public comment, take public comment in person, and will consider taking action.

The next webinar regarding the language arts standards will take place March 20, and the mathematics standards webinar will be March 21. To register go to:

<http://www.eed.state.ak.us/tls/assessment/2012AKStandards.html>

The question was also asked who is the audience is for the standards. Academic standards are technical documents written for teachers, writers of curriculum, and writers of assessments -- those responsible for implementing the standards. The proposed standards use the technical terms of education, language arts and mathematics. Mathematics in particular, especially in the higher grades, uses complicated technical terms and concepts.

If the State Board approves the standards, the department will create parent guides for each grade containing a summary in plain English of what students should know and be able to do in English language arts and mathematics. Note that even the National PTA's parent guides use technical terms to describe higher mathematics.

I have attached a document, titled "Memo on standards to the House Education Committee." This document explains what academic standards are, what are meant by college and career ready, and provides an excellent link for additional information. I am also attaching slides from a PowerPoint that provides an overview to the standards, and Deputy Commissioner Morse will address these slides during the March 12, 2012, House Education hearing.

I also want to make the committee aware of a research study commissioned by the department, and being conducted by the Center for Alaska Educational Policy Research (CAEPR) at UAA. This is a validity study examining courses at career and technical certificate-granting institutions as well as two- and four-year degree-granting institutions. The instructors in these institutions will provide specific information about their respective courses in relation to the proposed standards in reading, writing, and mathematics, ranking the standards by importance for entering students to know. Additionally, each instructor will be able to add comments that will address standards they feel are missing. This validity study will help the State Board know, prior to taking final action, if the standards match up with the expectations necessary to enter career-technical education programs and universities in Alaska.

In the letter there are several questions about the standards documents as well as the standards themselves. I believe the webinars, which were previously addressed in this letter, will provide an excellent background in the standards; however, to really address these questions in an authentic manner it would be best to see content standards in practice. To have an academic discussion about the standards may be interesting, but to see the standards in the context of a classroom where teachers are having children address complex problems is much more instructive. We had the opportunity to see state standards implemented in both math and science when the Task Force on Theme Based Education met in Barrow. Both lessons used the Inupiaq Learning Framework as the basis for instruction. I would be happy to work with the Juneau School District to identify teachers that could provide this experience to the full committee by conducting a field visit to a local school. I am confident that we could do that in a timely manner.

The discussion regarding how the standards are assessed will provide an outline of the next step involved in building or selecting an assessment tool. Ideally the department would conduct this process following board action and be prepared to use a new assessment in 2016. To develop the

test items, test blueprints and then item proposals will have to be built and vetted by Alaskans prior to field testing the items with Alaska students. This process, which engages educators and experts from the field of behavioral measurement, must be carefully crafted to ensure that a valid and reliable test is created for Alaska students.

Finally, let me address how the adopted Cultural Standards become a part of the content standards. The Cultural Standards, as well as many elements and values that are important to local communities -- such as geography, local industry, weather patterns, and community norms -- all become part of the curriculum and instruction. The standards are a statement of the content that must be learned by students; however, the curriculum provides the rich context in which those standards and many other important elements to learn are outlined. When students perform well on their local curriculum, they also will perform well on the statewide assessments as long as we build those assessments in a valid, reliable, and transparent manner.

I apologize but I will not be able to attend the hearing as I have accepted an invitation from the Chief Justice of the Alaska Supreme Court to participate in a National Leadership Summit on School Justice. In my absence Deputy Commissioner Les Morse will be present, and will be prepared to address the committee.

Sincerely,



Mike Hanley  
Commissioner

Attachments:

- Letter from Chair of House Education Committee
- Memo to the House Education Committee
- Standards Development participant List
- Standards FAQ
- PowerPoint on Proposed Standards

Alaska State Legislature

Rep. Lance Pruitt, Vice-Chairman  
Rep. Sharon Cissna  
Rep. Eric Feige



Rep. Peggy Wilson  
Rep. Paul Seaton  
Rep. Scott Kawasaki

Rep. Alan Dick, Chairman  
**HOUSE EDUCATION COMMITTEE**

March 7, 2012

Commissioner Mike Hanley  
PO Box 110500  
Juneau, AK 99811

Re: **New Math Standards**

Dear Commissioner Hanley:

On Monday March 12, the House Education Committee will begin hearings on the proposed Alaska State Educational Standards. We will begin with the Math Standards, and go through them with appropriate detail.

Please be prepared to comment on and answer questions regarding the following:

How many public hearings for the proposed State Educational Standards have already occurred?

Who was the target audience for the proposed standards? Teachers, curriculum coordinators, parents?

Please give the names and contact numbers for those who 1) participated in the development of the proposed Alaska State Educational Standards **and** 2) were **not** educators.

In the introduction to the Mathematics standards (p.3), is the statement that "They (the standards) simply establish a strong foundation of knowledge and skills all students need *for success* after graduation." As we discuss these standards, please be prepared to show how each of these skills will prepare students "for success," ie. real-life problems.

Please be prepared to explain and give examples for the *Standards for Mathematical Practice* on pages 4-15 in the proposed Alaska Mathematics Standards.



In the *Description of Mathematics Standards* (p. 3) it states: The high school standards set a rigorous definition of readiness by helping students develop a depth of understanding and ability to apply mathematics to novel situations, as college students and employees *regularly* do.

Please give a few examples of applying mathematics to novel situations.

On Page 4 of the same section of the Mathematics Standards, is the statement: These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council’s report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as *sensible, useful, and worthwhile*, coupled with a belief in diligence and one’s own efficacy).

Please explain the above and give examples of “productive disposition” that will be promoted by these standards.

Also on Page 4 of the Mathematics Standards:

What is meant by the following? How is a teacher to apply them?

3. Construct viable arguments and critique the reasoning of others
5. Use appropriate tools strategically
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

From Pages 4-5 of the Mathematics Standards for the following, please give examples. Pick any real life situation.

**1. Make sense of problems and persevere in solving them.**

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?”

Please describe examples of the following. **In grades 3-5 mathematically proficient students will:**

- explain correspondences between equations, verbal descriptions, tables, and graphs
- draw diagrams of important features and relationships, graph data, and search for regularity or trends
- understand the approaches of others to solving complex problems
- identify correspondences between different approaches
- check if the solution makes sense

Please describe examples of the following. I can see teachers doing these, but struggle seeing all students doing them. How would a teacher approach teaching these strategies?

**In grades 6-8 mathematically proficient students will:**

- explain correspondences between a new problem and previous problems
- represent algebraic expressions numerically, graphically, concretely/with manipulatives, verbally/written
- explain connections between the multiple representations
- determine the question that needs to be answered
- make a plan for attempting a problem
- choose a reasonable strategy
- identify the knowns and unknowns in a problem
- solve a problem in more than one way

Please give examples of the following using real life problems. How would a teacher approach teaching these strategies?

**In grades 9-12 mathematically proficient students will:**

- make connections between a new problem and previous problems
- determine the question that needs to be answered
- make a plan for attempting a problem
- choose a reasonable strategy
- identify the knowns and unknowns in a problem
- break a problem into manageable parts or simpler problems

- represent algebraic expressions numerically, graphically, concretely/with manipulatives, verbally/written
- explain connections between the multiple representations
- solve a problem in more than one way
- explain the meaning of a problem and look for an entry point
- analyze a problem and make a plan for solving it
- explain correspondence between differing approaches to identify regularity and trends
- check answer using a different method
- identify correspondence between different approaches
- monitor and evaluate progress and change course if necessary
- check the answers to problems using a different method and continually ask, “Does this make sense?”

For the above, how would DEED assess the student’s performance on the Standards Based Assessment and the High School Graduation Qualification Exam?

As the standards call for districts to implement the Cultural Standards, please give three examples of how they might do that using the high school standards. Use examples from any of the five Alaska Native cultural areas.

I look forward to our discussion.

Sincerely,



Representative Alan Dick Chairman

# MEMORANDUM

**State of Alaska**  
***Department of Education***  
***& Early Development***

**To:** House Education Committee

**Date:** March 8, 2012

**Phone:** 465-2802

**Fax:** 465-4156

**From:** Mike Hanley  
Commissioner

**Subject:** State standards

## What are academic standards?

Academic standards are technical documents written for teachers, writers of curriculum, and writers of assessments. The proposed standards use the technical terms of education, language arts and mathematics. Mathematics in particular, especially in the higher grades, uses complicated technical terms and concepts.

If the State Board approves the standards, the department will create parent guides for each grade containing a summary in plain English of what students should know and be able to do in English language arts and mathematics. Note that even the National PTA's parent guides use technical terms to describe higher mathematics.

The proposed state standards answer the question of what we should strive to teach in each grade, with one grade building on previous grades and leading to the next grades, in English language arts and mathematics. For example, the standards tell us what fifth-graders should be taught in mathematics. That is a technical question. To answer it, you need to know mathematics, know how to teach mathematics, and understand the development of children.

To answer that sort of question, you also need to know what you're aiming for in English language arts and mathematics skills in a high school graduate. We do know what the end-users of our graduates want. More than half of our graduates need remedial courses in English and/or mathematics at the University of Alaska. Nationwide, a quarter of high school graduates who apply to the military cannot pass its entrance exam, the Armed Services Vocational Aptitude Battery. Across the country, business groups have expressed dissatisfaction with high school graduates.



Alaska's proposed standards are detailed. It takes 13 years for students to work their way through the standards and complete their public education. It takes skilled teachers a full school year to teach a year's worth of standards by translating these complicated ideas into terms that students can understand. That is the art and craft of being a teacher.

State standards do not introduce complexity and change in education. Those qualities have always existed. If we did not have state standards and had only district-level curricula, teachers would still have the task of translating complicated ideas into terms that students can understand. Districts would still have to indoctrinate newly hired teachers into their curricula, and districts would still revise their curricula every few years -- just as they did before state standards existed.

Complexity and change are part of private enterprise, as well. Some businesses practice a model of continuous improvement.

#### What do states mean by the terms "college ready" and "career ready"?

When we say "college," we mean every type of schooling and training after high school: the military, union apprenticeships, vocational certificate programs, associate's degrees in careers, and bachelor's degrees in careers and academic fields. Specifically, when we say "college-ready," we mean that high school graduates should not need remedial courses in their postsecondary institutions.

Many occupations require some sort of training beyond high school. Thus, the term "college-ready" applies to the needs of many students, far more than the few Alaskans who complete a bachelor's degree. There is an overlap in required skills for postsecondary technical training and academic degrees.

For example, the construction technology associate's degree from the University of Alaska Southeast requires students to take an algebra course that compares to an intermediate high school algebra course. If you ask that student when he's 14 years old whether he wants to study algebra, he might say no. He would not know whether algebra would be relevant to his adulthood.

What does "career ready" mean? There are hundreds of careers, and obviously students don't graduate high school ready to be electricians and doctors.

National associations that promote career and technical education list three criteria of career readiness: 1) academic preparation in high school; 2) personal traits and skills that employers value, such as being on time, behaving and dressing appropriately, being able to problem-solve and collaborate with others; and 3) training for a specific career.

The proposed standards in English language arts and mathematics meet the first criteria for those two fundamental subjects. The standards are not intended to deal with the second criteria, but they do not preclude schools from dealing with workplace readiness

in other ways. The standards prepare students to be able to enter postsecondary training and meet the third criteria.

It is important to note what the proposed standards are and what they are not. Standards in English language arts and mathematics do not preclude having other sets of standards such as for STEM, culture, career and technical education, entrepreneurship, or workplace readiness. In fact, the English language arts and mathematics standards could be partly taught through those subjects. For example, mathematics is a good preparation for engineering; English and mathematics have value for entrepreneurs.

### Why have academic standards?

The goal of formal education is not to meet students where they are and leave them there. If only 7% of our ninth-graders receive a bachelor's degree within six years of leaving high school, that is a cause for alarm. It is not a target to aim for. Nor should it be interpreted as a reflection of student desires. Rather, it reflects the limits that all of us responsible for public education have placed on those students.

An indication of student desires is the retention rates at the University of Alaska. Only about a quarter of freshmen seeking a B.A. at UA graduate within six years. Only about a third of freshmen seeking a technical certificate, associate's degree or bachelor's degree graduate within six years. In other words, three times as many Alaskans try for a UA certificate or degree as actually receive one. And we don't know how many other students wanted a credential but never entered postsecondary education.

Surely, there are many causes of this. We believe that some of the students' limitations are academic. Our evidence is that UA itself requires at least half of its students to take remedial (meaning high school-level) courses in English and mathematics. For example, in fall of 2009 UA had 3,587 first-time freshmen, of which 1,902 took remedial courses -- about 53%.

The proposed standards in English language arts and mathematics set high expectations for students and the public education system. The mathematics standards distinguish between standards that all students should strive for and standards for students taking advanced courses. The goal is to give students choices in life after high school.

We did not propose the English language arts and mathematics standards because we think they are the only important subjects in school, or because we think that school is the only source of valued knowledge.

We proposed the English language arts and mathematics standards because:

- 1) those subjects are fundamental to other school subjects and to training after high school on the job, in a technical school, the military, or college; and

2) the study of those subjects develops students' minds and habits of thought.

Students who study English language arts and mathematics learn to practice attentiveness, attention to detail, perseverance, creativity, problem-solving, individual and group learning, and complex and nuanced thinking.

One of the flaws of educating children for what seems relevant now is that as adults they might need to be very flexible in moving from job to job as the economy shifts. We must educate children for an adulthood that they and we cannot fully anticipate. The study of English language arts and mathematics is part of such a foundation.

State standards are an important element in equitable public education. Some of the strongest supporters of No Child Left Behind have been civil rights and disabilities organizations because they want schools to act on the premise that all children can learn and all will be held to the same standards.

We cannot agree with the characterization of standards as a fad. Every industrialized nation has them. Forty-five states and D.C. have adopted the Common Core standards, which generally are more rigorous than the states' original standards were. Over time, educational materials will be geared to the Common Core and similar standards. College and career-ready standards may be required under a reauthorized federal Elementary and Secondary Education Act. They are certainly required for a waiver from No Child Left Behind. They have been required for certain federal education funds.

#### Standards alone are ineffective

Admittedly, standards alone do not increase student achievement. School districts' curricula, professional development and teachers' instruction must incorporate the standards, or there will be no effect on the students.

Randi Weingarten, president of the American Federation of Teachers, recently published a statement called "Implementation Will Move the Needle." She said the Common Core standards (which are similar to Alaska's proposed standards) "are an essential building block for a better education system – not a new educational craze, a federal intrusion, or an untested idea." Weingarten said the standards must be supported by development of aligned curriculum, professional development, instructional materials, collaborative planning, and aligned assessments that inform instruction but are not used excessively or punitively. We agree.

Massachusetts set high standards more than a decade ago and worked through the challenges of implementing them. The result today is that Massachusetts is the highest-scoring state on the National Assessment of Educational Progress in its overall student body and in every subgroup of students. In other words, the percentage of African-American students in Massachusetts who score proficient on the NAEP is the highest of the states and D.C. The same is true of their Hispanic students, students with disabilities,

low-income students, and English language learners. Massachusetts is the only American state whose students score comparably on international assessments with leading nations such as Finland, Japan, Taiwan and South Korea.

It is important not to overpromise the effect of standards. Massachusetts has raised all boats, but it still has achievement gaps. Some of its students still need remedial courses in college. In fact, many of its students still don't score proficient on assessments (which is equally true of high-scoring nations). But Massachusetts has seen progress in proficiency rates, and it is giving parents and students an accurate understanding of whether a student is proficient.

#### Final thoughts

The costs of implementing more rigorous standards must be weighed by the costs of standing still. The costs of standing still will be borne by families. Every time an Alaska high school graduate spends money to attend UA and leaves without a diploma, his or her family has lost their investment. Every Alaskan high school graduate who is undereducated and has not reached his or her potential faces a greater risk of reduced earnings, unemployment, and reliance on public support.

For more information on Alaska's proposed standards, see  
<http://www.eed.state.ak.us/standfaqs.html>

For comments on the Brookings Institution report, which criticized the effectiveness of standards, see  
<http://education.nationaljournal.com/2012/02/common-cores-good-bad-and-ugly.php>



First Name	Last Name	School District/Campus Name	School	City
Kathy	Algeak	North Slope Borough School District		Barrow
J. Paul	Apfelbeck	Galena City Schools		Galena
Anne	Armstrong	University of Alaska Fairbanks		Fairbanks
Christina	Barlow	Craig City Schools	Craig High School	Craig
Phyllis	Barnett	Saint Mary's Schools		St. Mary's
Anne	Barnett	Anchorage Schools		Anchorage
Susan	Baxter	Alaska's Environmental Literacy Plan		Juneau
Sandra	Bell	Fairbanks North Star Borough Schools		Eielson AFB
Thomas	Belleque	Bering Strait Schools	Anderson Elementary School	Teller
Ray	Benson	Lower Kuskokwim Schools		Atmautluak
Matthew	Bierer	Fairbanks North Star Borough Schools		Fairbanks
Rebecca	Binkley	Southeast Island Schools		Thorne Bay
William	Black	Nenana City Schools	District Office	Nenana
Brian	Blitz	University of Alaska Southeast		Juneau
Mary	Bogard	Delta-Greely Schools		Delta Junction
Carole	Bookless	Juneau Borough Schools		Juneau
Gerry	Briscoe	Southeast Alaska Regional Resource Center		Anchorage
Valerie	Brooks	Ketchikan Gateway Borough Schools	Houghtaling Elementary	Ketchikan
Peggy	Bruno	Yukon-Koyukuk Schools		Huslia
Jeanne	Campbell	Kashunamiut Schools		Chevak
Arva	Carlson	Nine Star		Anchorage
Douglas	Carroll	Cordova City Schools		Cordova
Jamie	Carroll	Fairbanks North Star Borough Schools		Fairbanks
Nina	Chordas	University of Alaska Southeast		Juneau
Kathy	Christopherson	Lower Kuskokwim Schools		Bethel
Russell	Clark	Lower Yukon Schools	Pilot Station School	Pilot Station
Deanna	Claus	Craig City Schools		Craig
Carol	Combs	Anchorage Schools		Anchorage
Gary	Cooper			Anchorage
Sandra	Cott	Lower Kuskokwim Schools		Bethel
Cathy	Coulter	University of Alaska Anchorage		Anchorage
Barb	Crandall	Anchorage Schools		Anchorage
Samuel	Crow	Lower Kuskokwim Schools		Bethel
Michelle	Daml	Fairbanks North Star Borough Schools		Fairbanks
Jodi	Darling	Bering Strait Schools		Stebbins
Rodger	Davis	Take Flight Alaska		Anchorage

First Name	Last Name	School District/Campus Name	School	City
John	DeVold	Kenai Peninsula Borough Schools		Soldotna
Deborah	Dixon	AVTEC - Alaska's Institute of Technology		Seward
Benjamin	Dolgnier	Bering Strait Schools		Stebbins
Jean	Domansi	Lower Yukon Schools		Mountain Village
Teresa	Duncan	Dillingham City Schools		Dillingham
Hugh	Dymont	Lower Kuskokwim Schools		Bethel
Sarah	Edwards	Dillingham City Schools		Dillingham
Shelly	Eldred	Anchorage Schools		Anchorage
Mary	Ellison	Anchorage Schools		Anchorage
Deborah	Endicott	Southwest Region Schools		Dillingham
Sara	Erickson	Lake and Peninsula Borough Schools		
Ben	Eveland	Career and Technical High School		Wasilla
Philip	Farson	Anchorage Schools		Anchorage
Michael	Fenster	Anchorage Schools		Anchorage
Amanda	Ferrari	Pribilof Schools		St. Paul
Dora Judith	Ferri			Fairbanks
Robert	Fish	Kodiak Island Borough Schools	Kodiak High School	Kodiak
Terry	Folsom	Valdez City Schools		Valdez
Victoria	Foote	University of Alaska Fairbanks - Rural Health Prog		Fairbanks
Emily	Forstner	Mat-Su Borough Schools		Wasilla
Michelle	Foss	Anchorage Schools		Anchorage
Virgil	Fredenberg	UAS School of Education		Juneau
Ron	Fuhrer	Anchorage School District		Anchorage
Marina	Gantz	Anchorage Schools	Boniface Educational Center	Anchorage
Pamela	Garcia	Juneau Borough Schools		Anchorage
Monica	Garza	Yukon-Koyukuk Schools		Juneau
Rebecca	Gerik	Anchorage Schools		Minto
Dianna	Gharst	Bering Strait Schools		Anchorage
Matthew	Gho	Anchorage Schools		Elim
Julia	Gibeault	Anchorage Schools		Anchorage
Kim	Girard	Anchorage Schools		Anchorage
Amber	Glynn	Delta/Greely Schools		Anchorage
Diana	Grady	Bering Strait Schools		Delta Junction
Cindy	Granatir	North Slope Borough Schools		Unalakleet
Kirsten	Gray	Fairbanks North Star Borough Schools		Barrow
Jessica	Graziano	Anchorage Schools		Fairbanks
				Anchorage

First Name	Last Name	School District/Campus Name	School	City
David	Grimes	Kake City Schools	Kake Elementary & High School	Kake
Alison	Gryga	Kashunamiut Schools		Chevak
Paul	Gutzler	Kenai Peninsula Borough Schools		Homer
Cheryl	Guyett	Anchorage A.J. Dimond High School		Anchorage
Joseph	Hackenmueller	Anchorage School District		Anchorage
Teresa	Hall	Fairbanks North Star Borough Schools		Fairbanks
John	Hamill	Alaska Military Youth Academy		Fort Richards
Kimberly	Handy	Anchorage Schools	East High School	Anchorage
Erik	Hanson	Kodiak Island Borough Schools		Kodiak
Susan	Hardin	Petersburg City Schools		Petersburg
Ranada	Hassemer	Kenai Peninsula Borough Schools		Soldotna
Nicole	Havert	Mat-Su Borough Schools		Palmer
Jeanette	Hayden	Fairbanks Hutchison High School		Fairbanks
Krista	Heard	Department of Education		Juneau
Dona	Helmer	Anchorage Schools		Anchorage
Martina	Henke	Anchorage Schools		Anchorage
Rebecca	Himschoot	Sitka Borough Schools		Sitka
Todd	Hindman	Nome City Schools	Anvil City Science Academy	Nome
Kimberly	Hoover	Southeast Island Schools		Naukati
Susan	Hubbard	Kuspuk Schools		Sleetmute
Matthew	Hunter	Mount Edgecumbe		Sitka
Ann	Ibele	Anchorage Schools		Anchorage
Marcia	Indahl	Anchorage Schools		Anchorage
Karen	Iris	Anchorage Schools		Anchorage
Amy	Iutzi	Department of Labor		Juneau
Matt	Johnson	Bering Strait Schools		Stebbins
Kimberly	Johnson	Kenai Peninsula Borough Schools		Anchor Point
David	Jones	Ketchikan Gateway Borough Schools		Ketchikan
Carolyn	Jordan	Fairbanks North Star Borough Schools		Fairbanks
Barbara	Jordan	Sitka Borough Schools	Tanana Middle School Blatchley Middle School	Sitka
Jamie	Katchatag	Bering Strait Schools		Unalakleet
John	Keller	University of Alaska Fairbanks		Fairbanks
Amy	Kesten	Juneau Borough Schools		Juneau
Ruth	Knight	Valdez City Schools	Valdez City Schools	Valdez
David	Kohler	Anchorage Schools		Anchorage
Sally	Kookesh	Chatham Schools		Chatham

First Name	Last Name	School District/Campus Name	School	City
Joe	Krause	Nenana City Schools		Nenana
Harvey	Kurzbard	Fairbanks North Star Borough Schools		Fairbanks
Nathan	Laabs	Denali Borough Schools		Healy
Kathy	Leary	Ilisagvik College		Barrow
Lisa	Leeper	Nome Public Schools		Nome
Kim	Liland	Anchorage Schools		Anchorage
Celeste	Long	Anchorage Schools		Anchorage
Craig	Luchsinger	Kuspuk Schools		Aniak
Janice	Lund	Craig City Schools	Aniak Jr./Sr. High School	
Christy	Lyle	Kodiak Island Borough Schools	Craig Elementary	Craig
Diane	Maples	Alaska Tech Prep Consortium	Kodiak Middle School	Kodiak
Edward	Marman	Mat-Su Borough Schools		Anchorage
Mark	Martin	Denali Borough Schools		Palmer
Jeni	Mason	Denali Borough Schools		Healy
Carol	May	Juneau Borough Schools	Thunder Mountain High School	Cantwell
Romee	McAdams	Tribal Recruitment Coordinator		Juneau
Mary	McCaffrey	Skagway City Schools		Skagway
Les	McCormick	Chatham Schools		Angoon
Patricia	McDonald	EED SSOS		Juneau
Susan	McIntosh	Fairbanks North Star Borough Schools		Fairbanks
Scott	McKay	Valdez City Schools	Hermon Hutchens Elementary	Valdez
Lesa	Meath	Fairbanks North Star Borough Schools		Fairbanks
Helen	Mehrkens	Department of Education		Juneau
Debbie	Merle	Ketchikan Gateway Borough Schools		Ketchikan
Jim	Merriner	SBOE		
Vivian	Meyer	Skagway City Schools	Skagway City School	Skagway
Suzie	Michaud	Craig City Schools		Craig
Jenn	Miller	Wrangell City Schools		Wrangell
Stacy	Miller	Anchorage Schools		Anchorage
Sheila	Miller	Ketchikan Gateway Borough Schools		Ketchikan
Carolyn	Mork	Sitka Borough Schools		Sitka
Karla	Moxley	North Slope Borough Schools	Keet Gooshi Heen Elementary	Barrow
Suzan	Mullane	Anchorage Schools		Anchorage
Gretchen	Murphy	Anchorage Schools		Fairbanks
Mary	Murphy	Take Flight Alaska		Anchorage
Tyler	Nalisnick			Anchorage



First Name	Last Name	School District/Campus Name	School	City
Debbie	Narang	University of Alaska Anchorage		Anchorage
Allyson	Nicholson	Fairbanks North Star Borough Schools		Fairbanks
Doug	Noon	Fairbanks North Star Borough Schools		Fairbanks
Judy	Norton-Eledge			Anchorage
Carl	Oberg	Anchorage School District		Anchorage
Mark	O'Brien	Ketchikan Gateway Borough Schools		Ketchikan
Greg	Owens	University of Alaska Fairbanks		Fairbanks
Tammy	Palmer	Mat-Su Borough Schools		Palmer
Tina	Pasteris	Juneau Borough Schools	District Office	Juneau
Star	Patterson	Fairbanks North Star Borough Schools	Two Rivers School	Fairbanks
Philip	Patterson	University of Alaska Fairbanks		Fairbanks
Paula	Pawlowski	Alaska PTA - Parent Engagement		Anchorage
Marjorie	Payton-Hewlett	Southwest Alaska Vocational & Education Center		King Salmon
Jodi	Picou	Mat-Su Borough Schools		Palmer
Angela	Pirtle	Sitka Borough Schools	Keet Gooshi Heen Elementary	Sitka
Kathy	Port	Fairbanks North Star Borough Schools		Fairbanks
Steve	Potter	Juneau Borough Schools		Juneau
Gale	Pratt	Yukon Flats Schools	Juneau-Douglas High School	Fort Yukon
Lolly	Rader	Anchorage School District		Anchorage
Jennifer	Randall	Fairbanks North Star Borough Schools		Fairbanks
LaDonna	Rees	Anchorage Schools		Anchorage
Melissa	Reese	Valdez City Schools		Valdez
Cliff	Reimers	Anchorage Schools		Anchorage
Cathy	Rexford	North Slope Borough School District		Barrow
Mary	Richards	Anchorage Schools	South Anchorage High School	Anchorage
Anthony	Rickard	University of Alaska Fairbanks		Fairbanks
Melissa	Rickey	University of Alaska Fairbanks		Fairbanks
Amber	Rinella	Mat-Su Borough Schools		Palmer
William	Rodawalt	Dillingham City Schools		Dillingham
Roy	Roehl	University of Alaska Fairbanks		Fairbanks
Lesa	Rohrer	Northwest Arctic Borough Schools		Kotzebue
Lori	Rucksdassel	Anchorage Schools		Anchorage
Margaret	Salisbury	Fairbanks North Star Borough Schools		Fairbanks
Jessica	Schauffler	Fairbanks North Star Borough Schools		Fairbanks
Laurie	Schoenberger			Juneau
Sandy	Schoff			Anchorage

First Name	Last Name	School District/Campus Name	School	City
Deanna	Schultz	University of Alaska Anchorage		Anchorage
Jeff	Selvey	Department of Labor & Workforce Development		Anchorage
Barb	Shogren	Mat-Su Career & Tech Education Department		Palmer
Maria	Skala	Anchorage Schools		Anchorage
Sheri	Skelton	Bering Strait Schools	White Mountain School	White Mountain
Jan	Slattery	Anchorage Schools	East High School	Anchorage
Bev	Smith	Bev Smith Educational Consulting		Douglas
Alan	Sorum	Prince William Sound Community College		Valdez
Katy	Spangler	UAS School of Education		Eagle River
Sally	Spieker	University of Alaska Anchorage	St. Paul School	Anchorage
Jamie	Stacks	Pribilof Schools		St. Paul
Sarah	Stanley	University of Alaska Fairbanks		Fairbanks
Robbin	Stockton	North Slope Borough Schools		Barrow
Jennifer	Stone	University of Alaska Anchorage		Anchorage
Janice	Summers	Anchorage Schools		Anchorage
Amy	Summers	Fairbanks North Star Borough Schools		Anchorage
Sabrina	Sutton	Kodiak Island Borough Schools	East Elementary	Fairbanks
Patrick	Tatera	Galena Schools	Interior Distance Education of AK (IDEA)	Fairbanks
Dana	Thomas	University of Alaska Fairbanks		Bethel
Joel	Thomas	Lower Kuskokwim Schools		Chevak
Laron	Thomas	Kashunamiut Schools		Palmer
Nancy Georgia	Tompkins	Mat-Su Borough Schools	Academy Charter School	Skagway
Jo-Ann	Trozzo	Skagway City Schools		Copper Center
Tamara	Van Wyhe	Copper River Schools	Kenny Lake School	Aniak
Emily	Vanderpool	Kuspuk Schools		Fairbanks
Theresa	Vick	Fairbanks North Star Borough Schools	District Office (JSD)	Juneau
John	Wahl	Juneau Borough Schools		Nome
Allison	Wall	Mat-Su Borough Schools		Naknek
Douglas	Walrath	Northwestern Alaska Career and Technical Center		Soldotna
Jack	Walsh	Bristol Bay Borough Schools		Kodiak
Matt	Walton	Kenai Peninsula Borough Schools	Soldotna High School	Anchorage
Bill	Watkins	Kodiak Island Borough School District		
Lisa	Weight	Anchorage Schools		
Tracie	Weisz	Alaska Gateway Schools		
Seth Marie	Westfall	Anchorage Schools		
Harry	White	Yukon-Koyukuk School District		

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Sandra	Wildfeuer	University of Alaska Fairbanks		Fairbanks
Penny	Williams	Anchorage Schools	Boniface Educational Center	Anchorage
Lynn	Williams	EED		
Susan	Wilson	Anchorage Schools		Anchorage
Laura	Wren	Anchorage Schools		Anchorage
Samantha	Wuttig	Fairbanks North Star Borough Schools	District Office	Fairbanks
Bei	Yang	Anchorage Schools		Anchorage
Joe	Zawodny	Anchorage Schools	Rogers Park Elementary	Anchorage
Elizabeth	Zeuli	Anchorage Schools		Anchorage
Leslie	Zibell	Northwest Arctic Borough Schools		
Victor	Zinger	University of Alaska Fairbanks		Fairbanks
Holly	Zwink	Kenai Peninsula Borough Schools		

# **Alaska proposes new standards for English language arts and mathematics in the public schools**

## **Speak out about Alaska's student standards**

The State Board of Education & Early Development welcomes your comments on proposed new standards in English language arts and mathematics for public school students.

All public comments will go to the State Board for their consideration. The State Board, which has the authority to adopt state standards, is scheduled to decide the issue in June 2012. The State Board could choose to adopt the standards as proposed, adopt them with changes, or not adopt them.

If the new standards are adopted in June 2012, the state will work with school districts to align their curriculum to the new standards. The department expects that students would first be assessed in the new standards in spring 2016.

## **Why are new standards being proposed?**

The new standards would guide the education of students from kindergarten through grade 12 so that Alaska's high school graduates are ready for postsecondary education, career training and the workplace. Alaska's current standards do not reach this goal for two main reasons: they stop at grade 10, and they are not rigorous enough.

Currently, many Alaska's high school graduates who enter bachelor degree programs at the University of Alaska need remedial courses in English and/or mathematics. Those students are more likely to drop out of college. Employers also say high school graduates are not fully prepared for the workplace. Only about a third of Alaska students score proficient or above on the National Assessment of Educational Progress, a rigorous test in English and math given to large samples of fourth-graders and eighth-graders in each state.

Alaska's high school graduates must be prepared to compete for jobs, even within Alaska, with people from across the United States and the globe. The proposed standards would increase our students' skills in academic English and mathematics. These skills are important in business, industry, government, and science and technology.



## **Briefly, how do the proposed standards differ from current standards?**

The proposed standards for English language arts cover reading, writing, vocabulary, and speaking and listening. Our current grade-level standards cover only reading and writing. Speaking and listening are important skills in postsecondary classrooms and the workplace. In addition, the proposed standards expect students to develop their language skills in the context of many subjects, not just literature. This is important because employers say that employees are not always skilled in reading and writing informational documents.

Finally, as an appendix to the standards, Alaska educators will provide lists of recommended literary and informational texts that challenge students to build knowledge, gain insights, and broaden their perspective.

In mathematics, students will be taught the content of some standards a grade earlier than they are now so that students in the earlier grades are well-prepared for high school. In high school, students will develop a depth of understanding and the ability to apply mathematics to new situations, as college students and employees must do. The proposed standards align with expectations for students from the National Council of Teachers of Mathematics and the National Research Council of the National Academy of Sciences and the National Academy of Engineering.

## **How were the proposed new standards created?**

For nearly two years, the Alaska Department of Education & Early Development has worked on the standards with rural and urban Alaskans from around the state, including representatives of universities, career and technical programs, and industries. Working groups also included teachers and other specialists in English and mathematics; school districts' curriculum coordinators; librarians; high school teachers of career and technical subjects; and teachers who work with struggling schools, students with disabilities, English language learners, economically disadvantaged students, and students of diverse ethnicities.

The Alaska reviewers compared Alaska's current standards with new nationwide standards in reading, writing and math for each grade from kindergarten to 12, and with new nationwide college-ready and career-ready standards, which define what students must know and be able to do to be ready for postsecondary education or careers.

The review process incorporated the best of Alaska's current standards, added new standards, and revised standards for clarity. Reviewers paid attention to what was developmentally appropriate to each grade level. They made sure that each grade level gradually built toward a high level of skill and understanding in grade 12 students.

The nonprofit National Center for the Improvement of Educational Assessment reviewed Alaska's proposed standards in detail. The University of Alaska will review the standards to determine whether they will lead to high school graduates who are ready for college without remediation.

The result is a set of standards created by Alaskans but comparable in rigor to new standards that are being adopted around the United States. The department expects that many curricular materials that will be developed for the new nationwide standards would be relevant to Alaska's proposed standards.

## **How would the new standards be used?**

The proposed new standards provide a consistent, clear understanding of what students are expected to learn so that teachers and parents know what they need to do to help students.

School districts would use the standards as the framework for their curriculum in English language arts and mathematics. In turn, teachers would use their district's curriculum to determine their lesson plans.

The standards do not tell teachers how to teach. The standards do not preclude the use of culturally relevant teaching methods. The standards represent a goal. Educators locally will determine how to meet this goal.

The standards in English language arts and mathematics are not meant to imply that those are the only important subjects in school, or that school-based knowledge is the only important type of knowledge. The department proposed new standards in English language arts and mathematics because those subjects are fundamental to many other subjects in school and to many occupations and aspects of daily life.

The department would use the standards to develop assessments for students. The results of these assessments will show whether students have advanced skills, proficient skills, or less than proficient skills in English language arts and mathematics.

For families, the assessments help you understand your students' readiness for postsecondary education and careers. Classroom grades and the observations of teachers and families also show how students are performing in school.

For all Alaskans, the assessments allow us to see how students are doing schoolwide, districtwide and statewide. Citizens, policymakers and administrators locally and at the state level will be able to see the bigger picture of student achievement. At the same time, educators can look at results for subgroups of students, such as economically disadvantaged students or students with disabilities. That helps school districts understand where to target their resources.



The assessments allow Alaskans to see whether more students are becoming proficient over time. The federal government currently requires states to have standards and assessments, and to use the assessment results to hold school districts accountable for increasing student achievement. Alaska has a similar statute.

### **If the State Board approves the proposed new standards, what are the next steps?**

The Alaska Department of Education & Early Development will prepare brochures that summarize the standards at each grade level for families and for educators. Parents, students and teachers will be able to understand the expectations for students in English language arts and mathematics at each grade.

Just as Alaskans have high expectations for students, we must have high expectations for the educational system at the local and state level. Implementing new standards requires a transition period. Students will be educated for nearly four years under the new standards before they are assessed in them.

This provides time for school districts to closely align what is taught in the classroom to the new standards. The state, as well, must align new assessments with the standards.

The department will provide school districts with a clear understanding of the differences between Alaska's former standards and the new standards, and offer online guidance in making the transition. Additionally, the department will continue to provide districts twice-yearly institutes on curriculum and alignment.

### **How can I comment on proposed new standards?**

You can review the proposed new standards online at <http://www.eed.state.ak.us/regs/>, where you also can submit comments electronically.

If you would like a copy of the standards mailed to you, contact Eric Fry at 907-465-2851 or [eric.fry@alaska.gov](mailto:eric.fry@alaska.gov) or Dorothy Knuth at 907-465-2802 or [Dorothy.knuth@alaska.gov](mailto:Dorothy.knuth@alaska.gov).

You may submit comments in writing by fax or mail. Fax comments to 907-465-4156 attention Dorothy Knuth. Mail comments to Alaska Department of Education & Early Development, Attn: Dorothy Knuth Regulation Comments, 801 West 10<sup>th</sup> Street, Suite 200, P.O. Box 10500, Juneau, AK 99811-0500.

The deadline to submit comments prior to the State Board meeting is May 12. If you would like to make your comments in person or telephonically at the June 7-8, 2012,

State Board meeting in Anchorage, see [http://www.eed.state.ak.us/State Board/](http://www.eed.state.ak.us/State_Board/) in late May, when the agenda will be posted.

## **How can I read more about it?**

The current standards and the proposed standards are at <http://www.eed.state.ak.us/tls/assessment/2012AKStandards.html>

## **Summary of proposed English language arts standards**

The reading standards require students to read increasingly complex texts so that by the end of high school they are ready for the demands of college-level and career-level reading. The standards require that students grow in their reading comprehension; as they advance through the grades, they are able to gain more from whatever they read. The reading standards assume that students must be able to read well in all their courses. Students are expected to read challenging informational texts in subjects such as social studies and science, as well as literature.

The cornerstone of the writing standards is the ability to write logical arguments based on substantive claims, sound reasoning, and relevant evidence. The standards begin to teach these skills in the earliest grades. Students will be expected to conduct research in short, focused projects and longer in-depth projects. Research skills – in order to gather information before writing or speaking -- are emphasized throughout the language arts standards.

The language standards provide opportunities for students to develop their vocabularies through conversation, direct instruction, and reading. The standards emphasize word meanings and nuances of words, steadily expanding students' repertoires of words and phrases. Thus students build an ability to communicate with greater precision and complexity.

Oral uses of language are common in postsecondary education and the workplace. The speaking and listening standards require students to gain, evaluate, and present complex information, ideas and evidence through speaking and listening. An important focus of the speaking and listening standards is discussion of academic topics in one-on-one, small-group and whole-class settings. Formal presentations are valued. But so are informal discussions in which students collaborate to answer questions, build understanding, and solve problems.



## Summary of the proposed mathematics standards

The mathematics standards stress both procedural skills and conceptual understanding. This ensures that students absorb the critical information they need to succeed at higher levels. When students have deep understanding, they do not need prior instruction to be taught again the following year.

The mathematics standards seek to develop the following types of expertise: 1) make sense of problems and persevere in solving them; 2) reason abstractly and quantitatively; 3) construct viable arguments and critique the reasoning of others; 4) apply mathematics to solve problems in everyday life; 5) use appropriate tools strategically; 6) pay attention to precision; 7) look for and make use of structure; and 8) notice repeated calculations and look for general methods and shortcuts.

In kindergarten, the standards follow successful international models and recommendations by focusing on the number core: how numbers correspond to quantities and how to put together numbers and take them apart (the beginnings of addition and subtraction).

The standards for kindergarten to grade 5 provide students with a solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions, and decimals. With this foundation, students in kindergarten to grade 5 can do hands-on learning in geometry, algebra, probability and statistics.

The middle school standards are robust and provide a coherent and rich preparation for high school mathematics. Students who have mastered the mathematics skills through grade 7 will be well-prepared for algebraic concepts in grade 8.

The high school standards set a rigorous definition of readiness for postsecondary education and careers. Students develop a depth of understanding and the ability to apply mathematics to new situations, as college students and employees do.

### Please note

This document will be updated to be responsive to questions from the public. This version was posted online on Jan. 19, 2012.