



# Alaska's English Language Arts and Mathematics Standards Need for Change

# History of Standards

- **1990s:** Alaska standards in reading, writing, and mathematics were developed by age spans
- **2004:** Grade Level Expectations (GLEs) in reading, writing, and mathematics were developed to further define standards at each grade level (grades 3 – 10)
- **2006:** Grade Level Expectations were expanded to include kindergarten through second grade

# What do we know about Alaska's Grade Level Expectations?

Alaskan educators reviewed and compared the Alaska's Grade Level Expectations (GLEs) and other common national standards.

We know:

1. the GLEs are over six years old.
2. the GLEs do not extend beyond grade 10.
3. the GLEs are broad and open to teacher interpretation.
4. the GLEs are lower in rigor than other standards.
5. the GLEs are a blueprint for assessment.

What evidence suggests Alaska's students need a higher learning standard?

# National Competitiveness

- ▶ The National Assessment of Educational Progress (NAEP) is the common measurement of student achievement
  - NAEP was created in 1969; the No Child Left Behind Act (NCLB) mandated state participation in NAEP reading and math every other year
  - Alaska has NAEP data for 2003, 2005, 2007, 2009, and 2011 for grades 4 and 8 in reading and math

# NAEP – Reading Grade 4

Compare the Average Score in 2011 to Other States/Jurisdictions



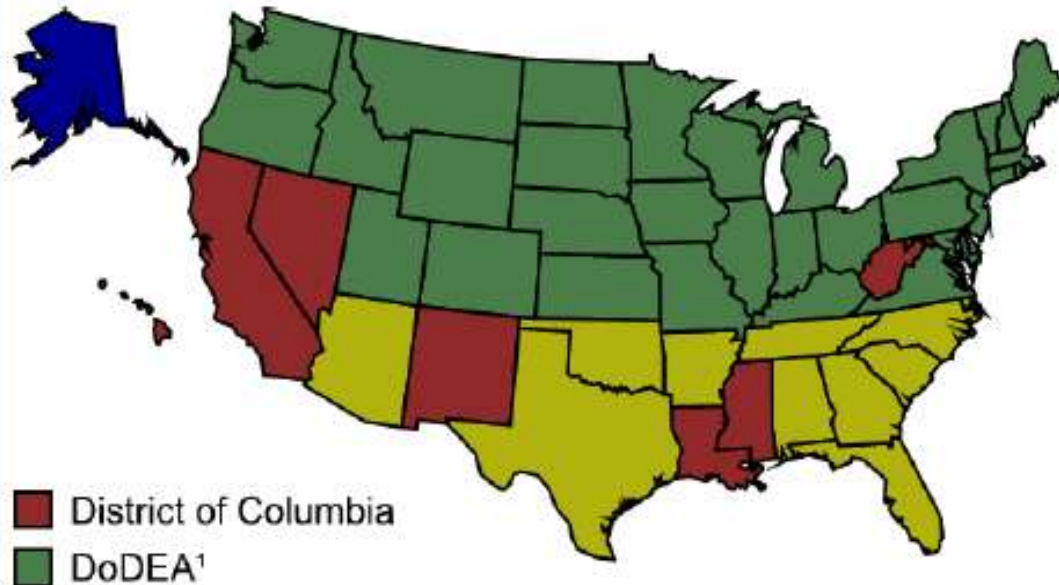
<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

In 2011, the average score in **Alaska** (208) was

- lower than those in 46 states/jurisdictions
- higher than that in 1 state/jurisdiction
- not significantly different from those in 4 states/jurisdictions

# NAEP – Reading Grade 8

Compare the Average Score in 2011 to Other States/Jurisdictions



<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

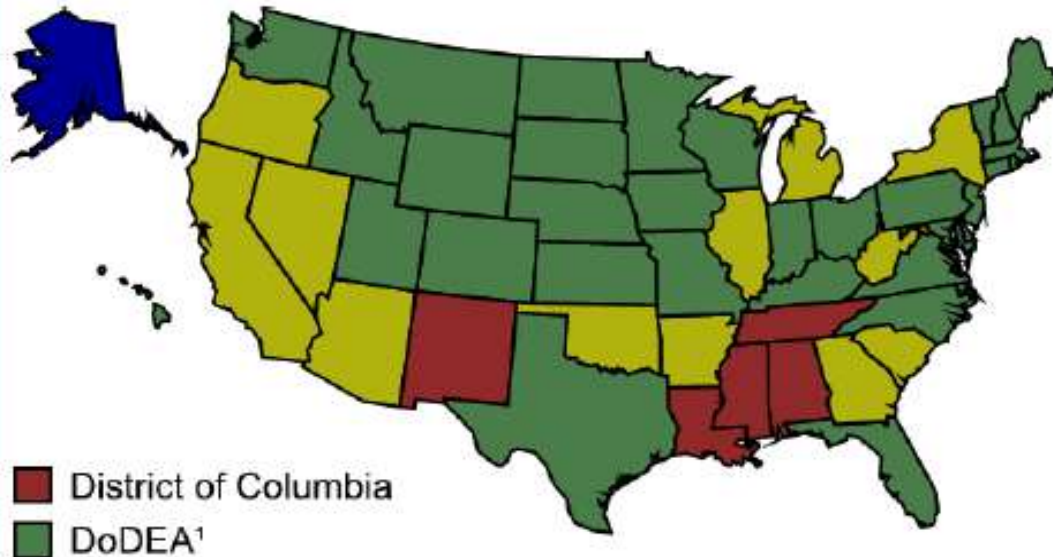
In 2011, the average score in **Alaska** (261) was

- lower than those in 33 states/jurisdictions
- higher than those in 8 states/jurisdictions
- not significantly different from those in 10 states/jurisdictions



# NAEP - Mathematics Grade 4

Compare the Average Score in 2011 to Other States/Jurisdictions



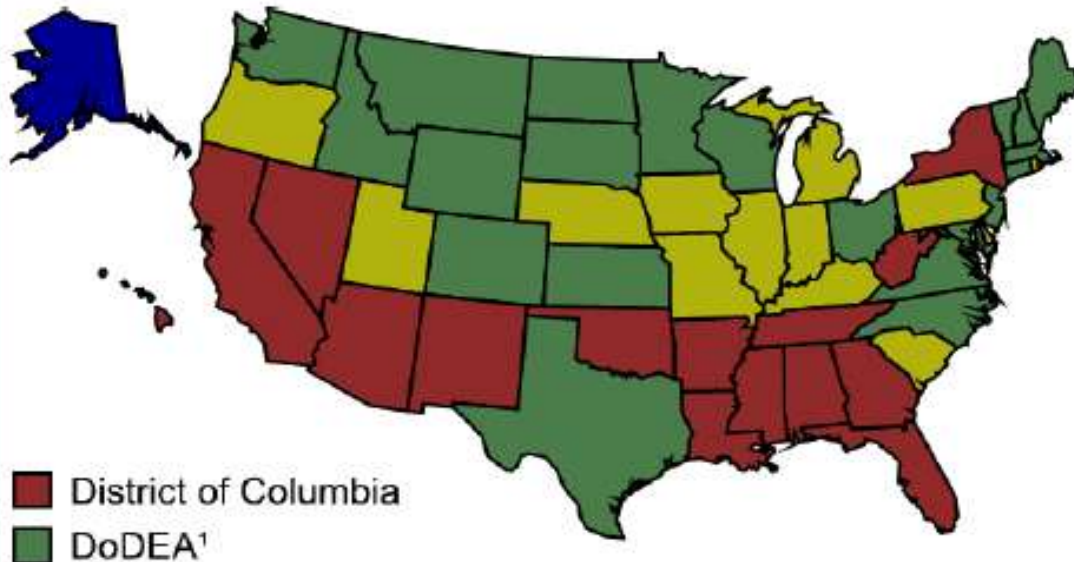
<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

In 2011, the average score in **Alaska** (236) was

- lower than those in 33 states/jurisdictions
- higher than those in 6 states/jurisdictions
- not significantly different from those in 12 states/jurisdictions

# NAEP - Mathematics Grade 8

Compare the Average Score in 2011 to Other States/Jurisdictions



<sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

In 2011, the average score in **Alaska** (283) was

- lower than those in 22 states/jurisdictions
- higher than those in 16 states/jurisdictions
- not significantly different from those in 13 states/jurisdictions

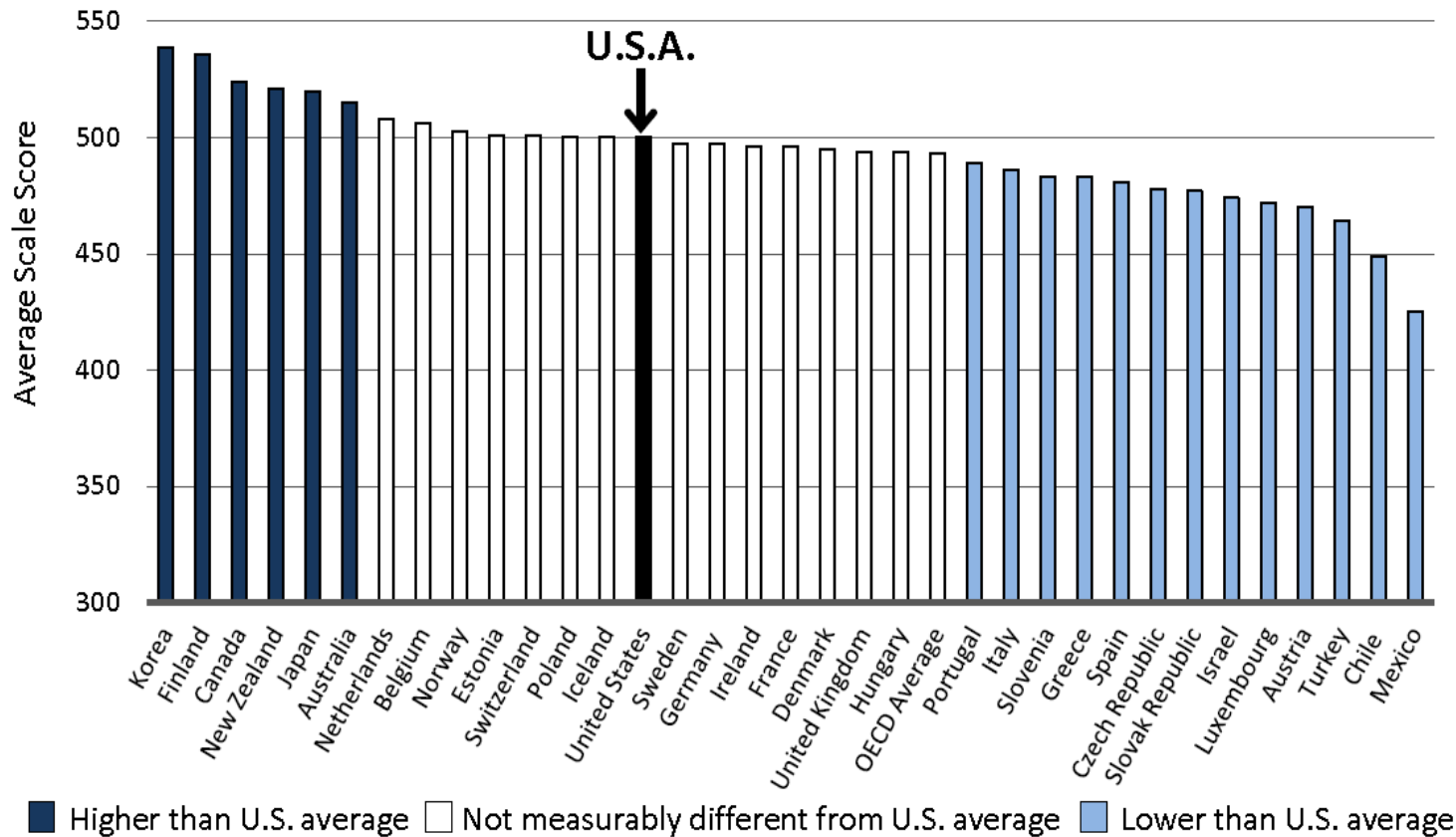
# International Competitiveness

The Program for International Student Assessment (PISA) is an international study which began in the year 2000.

- PISA aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students in participating countries/economies.
- Since the year 2000 over 70 countries and economies have participated in PISA.

# Of 34 OECD Countries, U.S.A. Ranks 12<sup>th</sup> in Reading Literacy

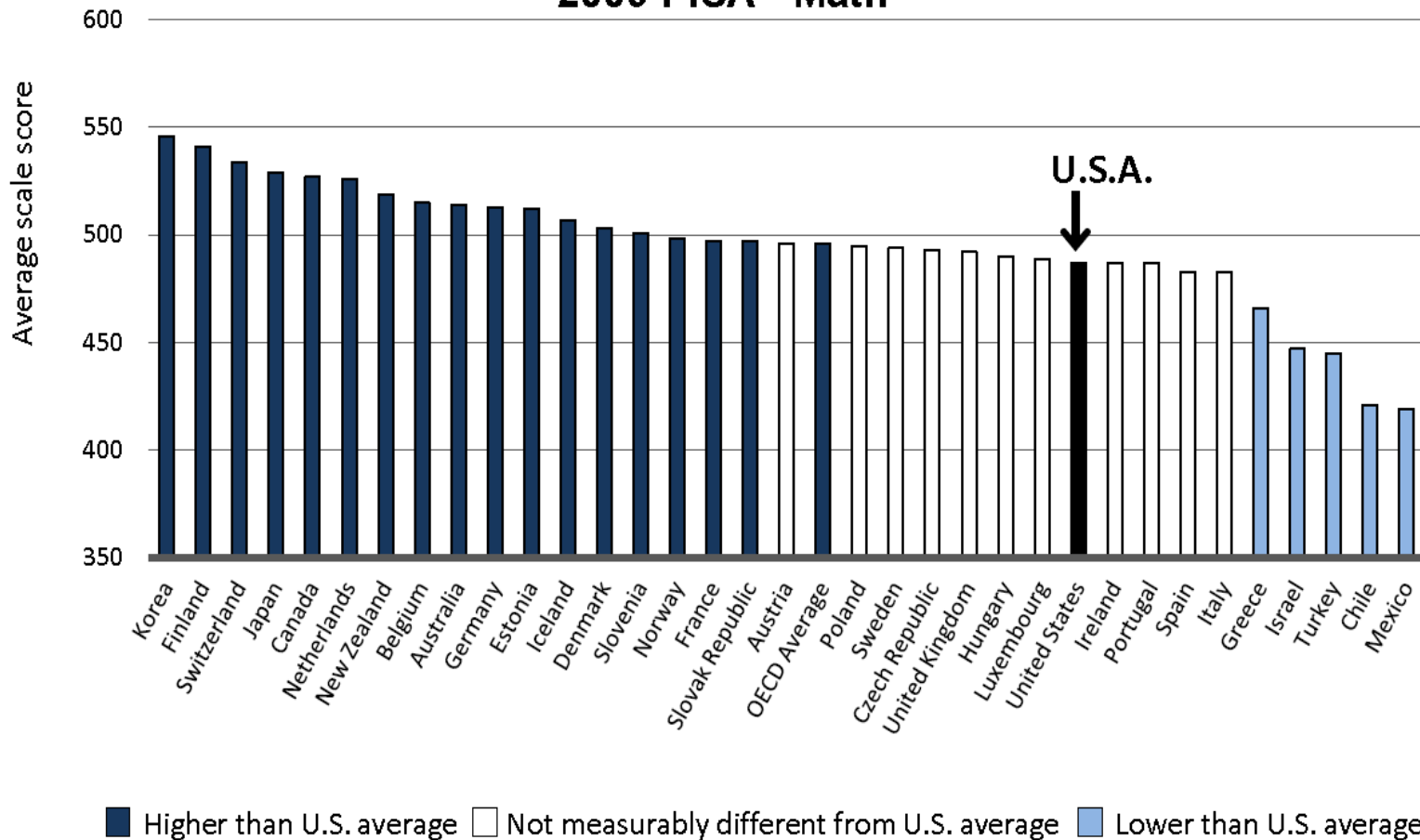
2009 PISA - Reading



Source: "Highlights from PISA 2009," NCES, 2010

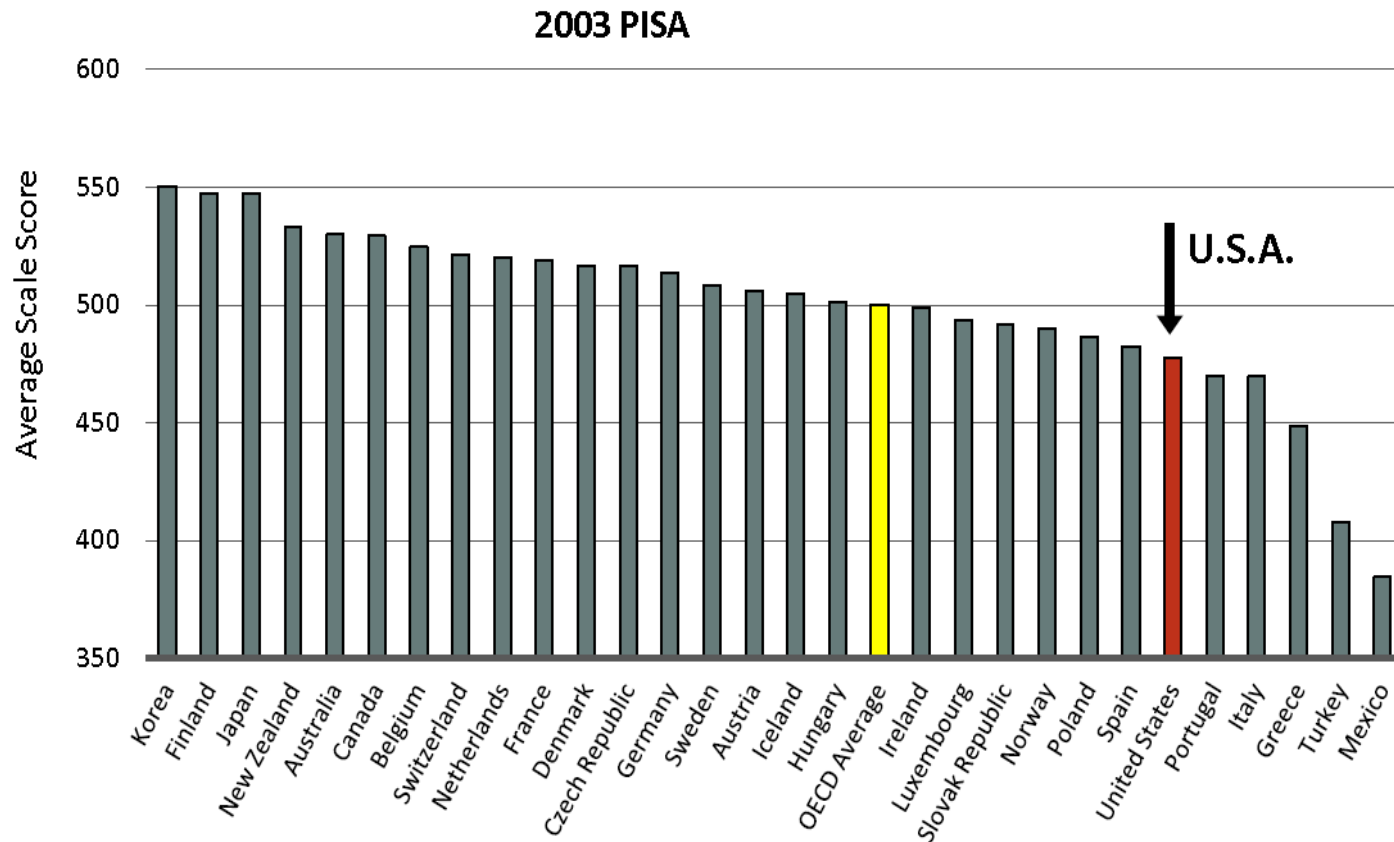
# Of 34 OECD Countries, U.S.A. Ranks 25<sup>th</sup> in Math

## 2009 PISA - Math



Source: "Highlights from PISA 2009," NCES, 2010

# U.S.A. Ranks 24<sup>th</sup> Out of 29 OECD Countries in Problem-Solving



Source: PISA 2003 Results, OECD

What makes the Alaska **English Language Arts** Standards different?

What tools will they provide so Alaska graduates can be nationally and globally competitive?

# English Language Arts

- address **kindergarten - 12** grade.
- increase **text complexity** within the Reading Standards.
- **connect** Reading and Writing Standards.
- **designate** Writing and Language Standards.
- provide **speaking** and **listening** criteria.



What makes the Alaska **Mathematics**  
Standards different?

What tools will they provide so  
Alaska graduates can be nationally  
and globally competitive?

# Mathematics Standards

- address **kindergarten – grade 12**.
- **focus** critical areas identified in grades K-8.
- provide **coherence** – progression of topics across grades allowing for higher level math earlier.
- establish increased **rigor** - increased through use of the Standards for Mathematical Practice.
- present by conceptual categories or domains instead of courses or grade levels in high school.

# Tools for Alaska's Graduates

1. Increased text complexity will bridge the gap between high school and college/work readiness.
2. Connections between writing and reading will strengthen research skills.
3. Speaking and listening standards promote collaboration and clear communication.
4. Rigorous math content will have application to real world problems.
5. In-depth analysis of mathematical and logical arguments will increase critical thinking skills.

# Relevancy

The new standards align with the uniqueness of Alaska. Combined with the Cultural Standards and local educators, relevant learning experiences will continue.

- Same relevancy as the GLEs
- Allow for relevancy at a greater level

The proposed standards establish a strong foundation of knowledge and skills all students need for success after graduation. It is up to schools and teachers to decide how to put the standards into practice and incorporate other state standards, including the cultural standards.

# Contacts

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