

A Close Look at *Don't Fail Idaho's* Student Achievement Message

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What did *Don't Fail Idaho* set out to accomplish with student achievement data?





Don't Fail Idaho is working in three main areas of focus:

Informed Conversation:

This campaign is not political. It does not seek to point fingers at individuals or even groups who are held captive by a broken system. ***Don't Fail Idaho seeks to provide the data, information, and resources so that everyone*** who has a stake in the future of Idaho. education ***can*** have open, meaningful conversations and ***make informed decisions.***

Collaborative Action:

Innovating Education:

Don't Fail Idaho seeks to provide the data ... so that everyone ... can ... make informed decisions.

What does *Don't Fail Idaho* want us to know about student achievement in Idaho?





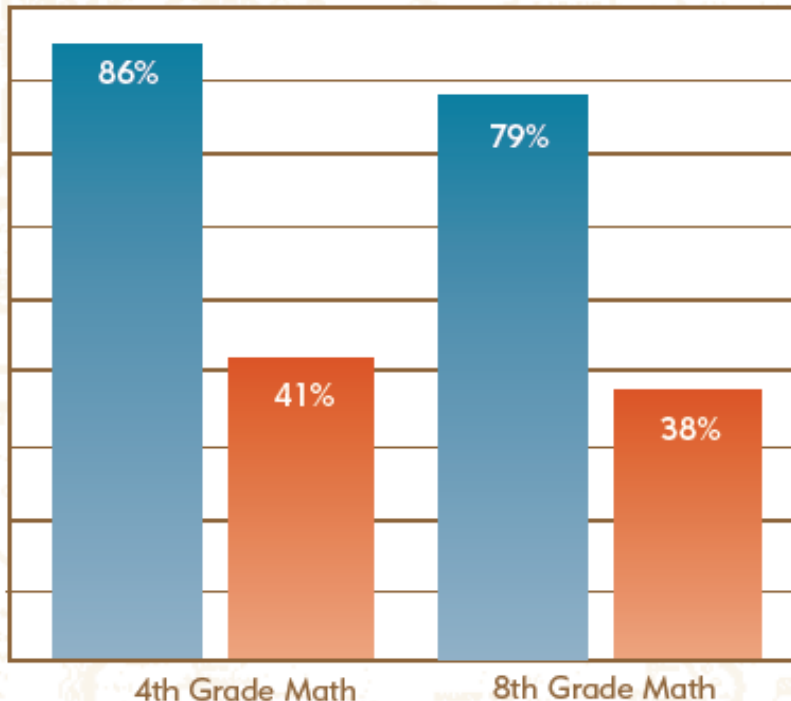
The *Don't Fail Idaho* media campaign repeats over and over its message on radio and television that **60% of Idaho's 4th and 8th graders are not making the grade in reading and mathematics, are falling further behind, and will never catch up.**

However, the campaign message is incorrect. It is based on a common misunderstanding about NAEP scores. It does not help anyone to make an “informed decision.” Just the opposite!

The data that *Don't Fail Idaho* uses to support its campaign can be found in the *Field Guide for Education in Idaho*?



Proportion of Idaho Students Testing Proficient in 4th and 8th Grade Math



- Idaho Standards Achievement Tests
- National Assessment of Educational Progress

Note: Proficiency rate for state test includes the combined number of those scoring in all three proficiency categories: partially proficient, proficient and advanced.

Source: Idaho Business for Education. (2013). *Field Guide to Education in Idaho*. p. 8.

The Idaho Standards Achievement Test (ISAT) is composed of reading, language usage, and mathematics tests for grades 3-10, and science tests for grades 5, 7, and 10.

The National Assessment of Educational Progress (NAEP) tests a sample of Idaho students in grades 4, 8, and 12 every year, in different subjects each year. NAEP is the only test that provides consistent data that can be compared across all states and internationally.

NAEP's policy definition of its “**Proficient**” achievement level is “competency over challenging subject matter” and is implicitly intended to be higher than grade-level performance.

When measured against the more rigorous standards of the NAEP, Idaho 4th and 8th graders do not perform nearly as well as the ISAT indicates.

The *Field Guide for Education in Idaho* uses NAEP in ways that the U.S. Department of Education and the National Assessment Governing Board did not intend.



The *Field Guide to Education in Idaho* defines NAEP's *Proficient* but not NAEP's proficiency in subject.

State assessments [like ISAT] often define “proficiency” as **solid grade-level performance**, often indicating readiness for promotion to the next grade.

NAEP's policy definition of its *Proficient* achievement level is “competency over challenging subject matter” and is implicitly intended to be **higher than grade-level performance**.

-- Andrew Kolstad, Senior Technical Advisor, Assessment Division, National Center for Education Statistics. [The National Center for Education Statistics is the federal agency that administers the National Assessment of Educational Progress (NAEP).]

The descriptors below are from a variety of NAEP publications and presentations. They have been selected to help define and clarify how NAEP achievement levels should be understood, interpreted, and used.

NAEP Achievement Level	English Language Descriptors Used to Explain the Meaning of the NAEP Achievement Levels	Letter Grade (A-F)	
		Stoneberg (2007)	Ravitch (2012)
<i>Advanced</i>		A to A+	A+
<i>Proficient</i>	Some of the best students you know Many words and terms above grade level Mastery of complex material Higher than grade level performance	B+ to A	A
<i>Basic</i>	<u>Proficiency in subject</u> (common language meaning) Overall understanding of grade appropriate text More than minimal competency	C- to B	B and C
<i>Below Basic</i>	Minimal competency	F to D+	Concern

It is important -- even crucial -- to know and understand that

- NAEP uses ***Proficient*** to name one achievement level.
- NAEP uses **proficiency in subject** to define the ***Basic*** achievement level.
- NAEP ***Proficient*** is not the same thing as NAEP's **proficiency in the subject**.

What Do NAEP Scores Mean?

By Diane Ravitch, May 14, 2012

Since I served on NAGB[†] for seven years, I can explain what the board's "achievement levels" mean.

Advanced is truly superb performance, which is like getting an A+.

Proficient is akin to a solid A.

Basic is akin to a B or C level performance.

And *Below Basic* is where we really need to worry. These are the students who really don't understand math or read well at all.

Source: <http://dianeravitch.net/2012/05/14/what-do-naep-scores-mean/>

[†]National Assessment Governing Board

Standards and Assessments Peer Review Guidance
April 28, 2004 [for Peer Review of ISAT]
Section 2: Academic Achievement Standards (p.24)



2.5 Critical Element

How has the State ensured alignment between challenging academic content standards and the academic achievement standards?

Examples of Acceptable Evidence

The State's academic achievement standards fully reflect its academic content standards for each required grade and describe what content-based expectations each achievement level represents. **The 'proficient' achievement level represents attainment of grade-level expectations for that academic content area.** The descriptors clearly define the skills for the attainment of that level.

Examples of Incomplete Evidence

The achievement level that represents 'Proficient' defines performance that does not represent grade-level attainment of the content standards.

Source: U.S. Department of Education. (2004). *Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001*. Washington, D.C.: Author. Available online (May, 13, 2013) at <http://www2.ed.gov/policy/elsec/guid/saaprguidance.doc>

What do we learn about Idaho 4th and 8th grade student achievement in reading and mathematics from NAEP 2011 when achievement levels are correctly understood and applied as intended?



NAEP 2011 reading, grade 4:
31% (not 60%) of Idaho's students scored below grade level (i.e., below NAEP *Basic*).

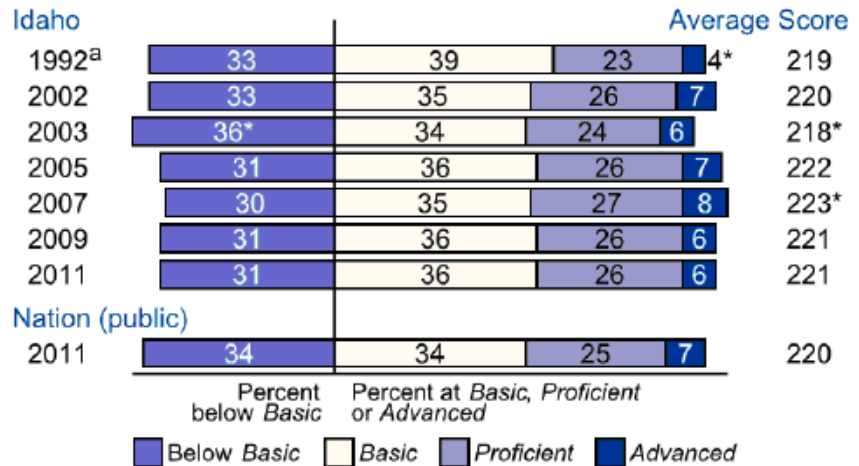
NAEP 2011 reading, grade 4:
32% of Idaho's students scored higher than grade level (i.e., at or above NAEP *Proficient*).

NAEP 2011 reading, grade 8:
19% (not 60%) of Idaho's students scored below grade level (i.e., below NAEP *Basic*).

NAEP 2011 reading, grade 8:
34% of Idaho's students scored higher than grade level (i.e., at or above NAEP *Proficient*).

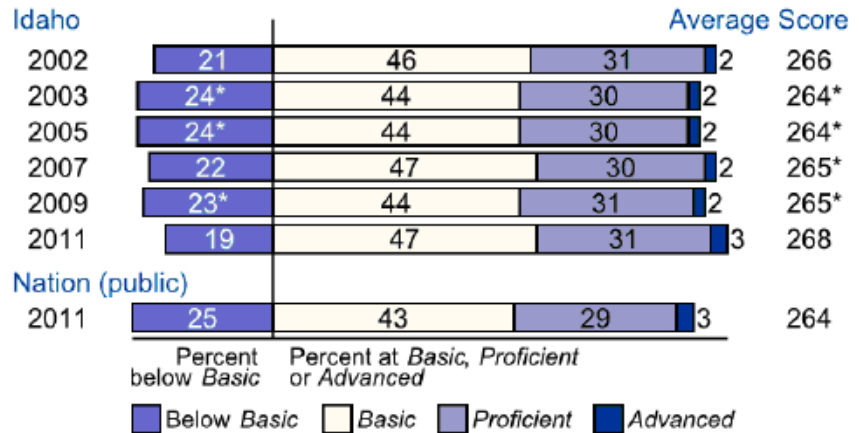
NAEP Reading, Grade 4

Achievement-Level Percentages and Average Score Results



NAEP Reading, Grade 8

Achievement-Level Percentages and Average Score Results



* Significantly different ($p < .05$) from state's results in 2011. Significance tests were performed using unrounded numbers.

NOTE: Detail may not sum to totals because of rounding.

NAEP 2011 mathematics, 4th grade: 17% (not 60%) of Idaho's students scored below grade level (i.e., below NAEP Basic).

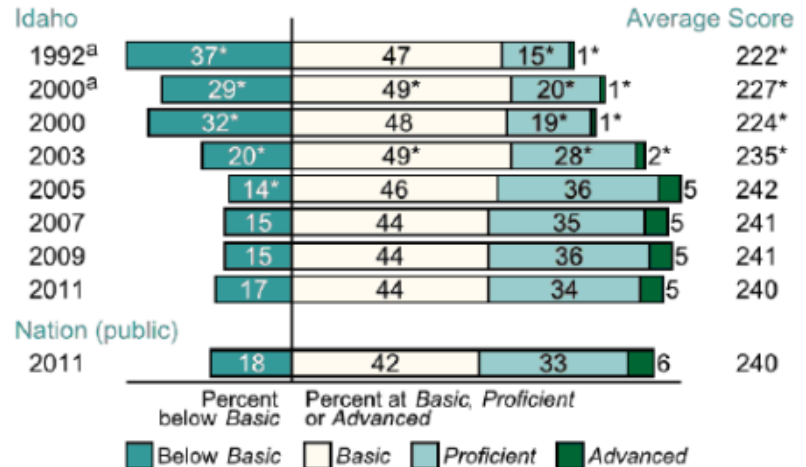
NAEP 2011 mathematics, 4th grade: 39% percent of Idaho's students scored higher than grade level (i.e., at or above NAEP Proficient).

NAEP 2011 mathematics, 8th grade: 23% (not 60%) of Idaho's students scored below grade level (i.e., below NAEP Basic).

NAEP 2011 mathematics, 8th grade: 37% of Idaho's students scored higher than grade level (i.e., at or above NAEP Proficient).

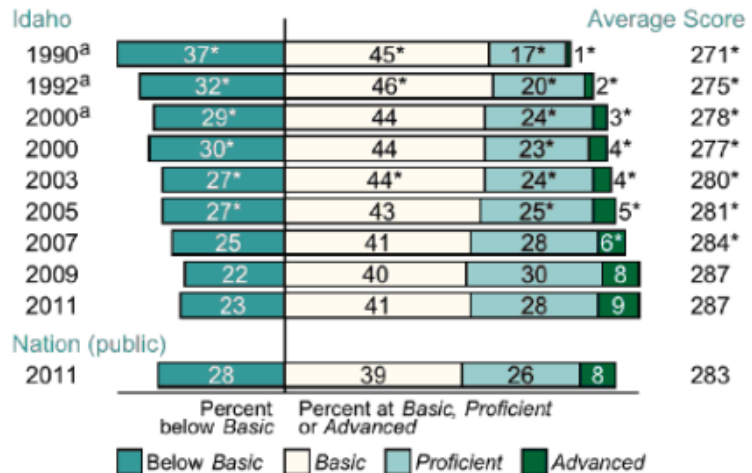
NAEP Mathematics Grade 4 2000-2011

Achievement-Level Percentages and Average Score Results



NAEP Mathematics Grade 8 2000-2011

Achievement-Level Percentages and Average Score Results



* Significantly different ($p < .05$) from state's results in 2011. Significance tests were performed using unrounded numbers.

NOTE: Detail may not sum to totals because of rounding.

All things considered, what is the “best way” to compare student achievement data from NAEP and ISAT?



A Non-Statistical Way to Look at NAEP Achievement Levels

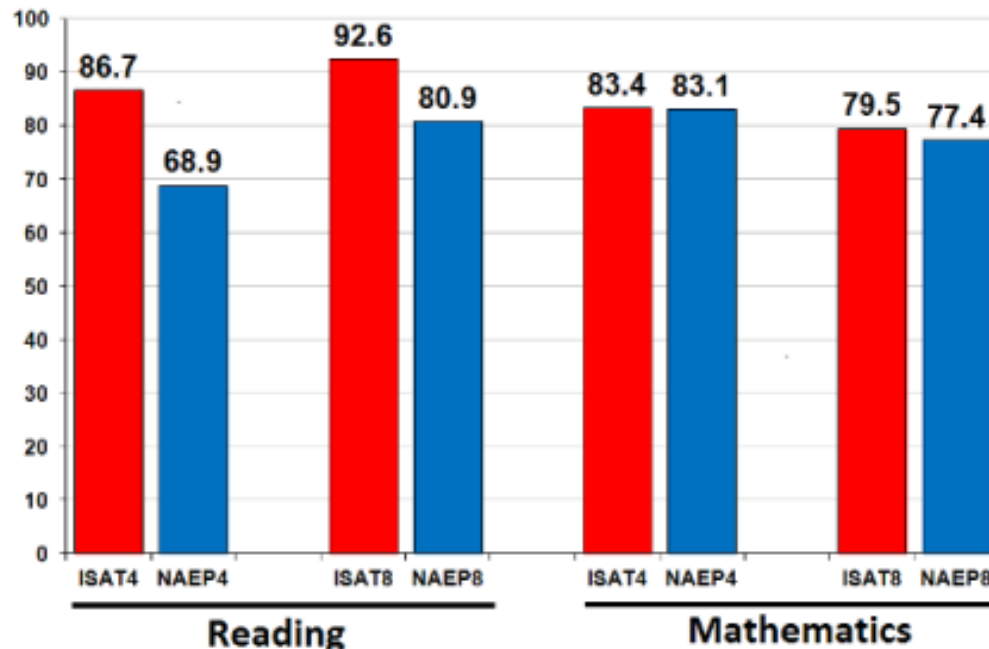
Achievement Levels	English Language Descriptors Used to Explain the NAEP Achievement Levels	Classroom Grades
<i>Advanced</i>		A to A+
Proficient	Some of the best students you know Many words and terms above grade level Mastery of complex material Higher than grade-level performance	B+ to A
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<i>Below Basic</i>	Minimal competency	F to D+

The best way to avoid confusion because “proficient” and “proficiency” are used in two NAEP achievement level definitions is to **compare NAEP and ISAT using the “percent meeting or exceeding grade-level expectations.”**

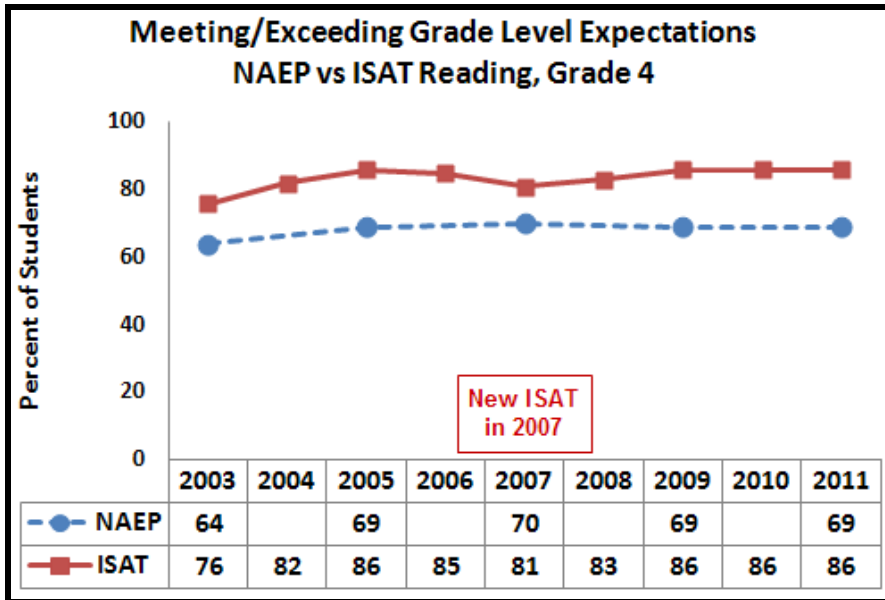
The *No Child Left Behind Act* (NCLB) required Idaho to report Adequate Yearly Progress (AYP) using an ISAT proficient achievement level that specified the percentage of Idaho students meeting or exceeding grade-level expectations.

The NAEP Validity Studies Panel concluded NAEP’s “percent *Basic* and above” as the most appropriate statistic for comparing NAEP with state AYP statistics.

Percentage of Idaho's fourth and eighth grade students who met or exceeded grade-level expectations for reading and mathematics on the 2011 ISAT (at or above proficient) and NAEP (at or above Basic).

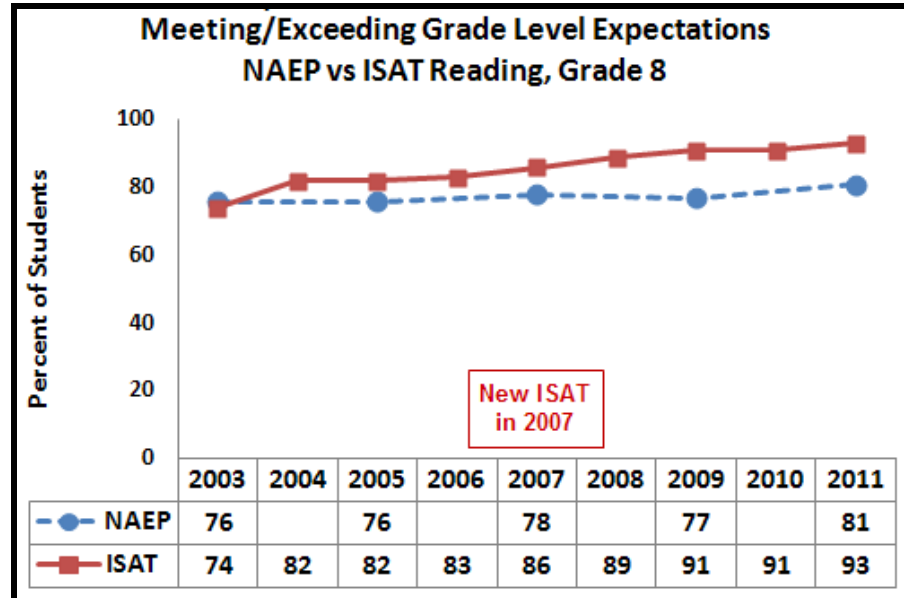


There is considerable overlap between Idaho's content standards for mathematics and NAEP's mathematics framework, so ISAT and NAEP should produce similar results. The content overlap is not as good for reading. While NAEP measures only reading comprehension, ISAT measures comprehension plus reading component skills.

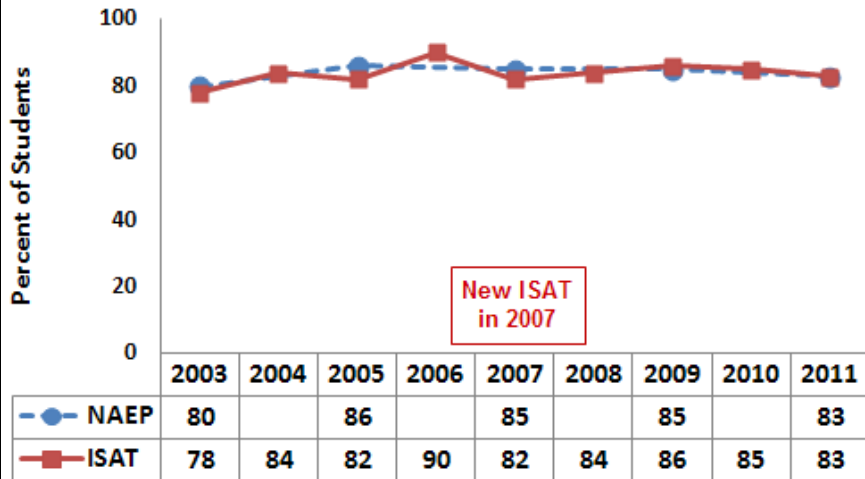


NAEP vs. ISAT
Reading
Grade 4
2003 to 2011

NAEP vs. ISAT
Reading
Grade 8
2003 to 2011



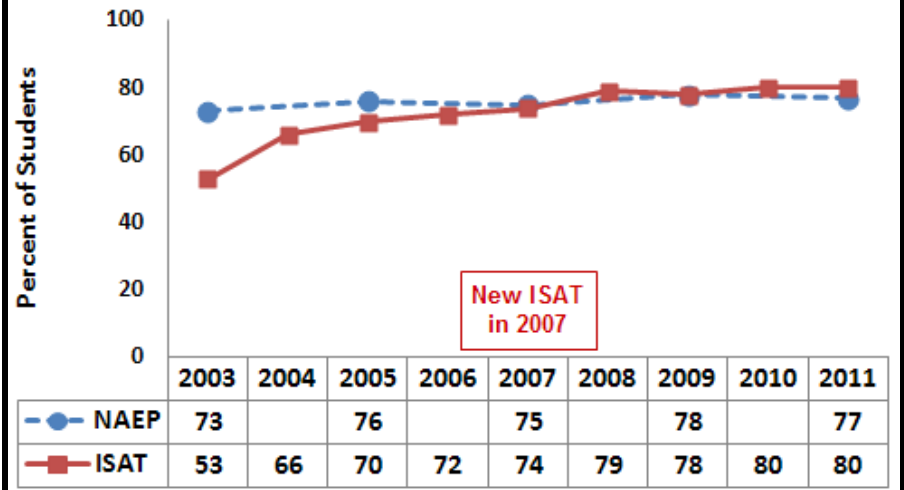
Meeting/Exceeding Grade Level Expectations
NAEP vs ISAT Mathematics, Grade 4



NAEP vs. ISAT
Mathematics
Grade 4
2003 to 2011

NAEP vs. ISAT
Mathematics
Grade 8
2003 to 2011

Meeting/Exceeding Grade Level Expectations
NAEP vs ISAT Mathematics, Grade 8



Does *Don't Fail Idaho's* message that “more than 60% of Idaho's 4th and 8th graders are not proficient in math and reading” give us cause to change our perspective about education in Idaho?

Remember half, usually more than half, of the students counted in the 60% actually perform at grade-level in reading and mathematics, which is akin to a B or C performance. They qualify for promotion to the next grade.





Don't Fail Idaho's media message is that “60% of Idaho’s 4th and 8th graders are not making the grade in reading and mathematics, are falling further behind, and will never catch up.”

The message, however, is based on a common misunderstanding of NAEP achievement levels, and is incorrect.

It is sad but this message cannot help anyone make an “informed decision” about school reform. Just the opposite!

Don't Fail Idaho sees it as its job to provide the data ... so that everyone ... can ... make informed decisions.



Bert Stoneberg, Ph.D.
NAEP State Coordinator, Ret. (2002-2012)
Idaho State Department of Education

EDUCATION/TRAINING:

University of Maryland (College Park, Maryland), 2003, Graduate Certificate in Large-Scale Education Assessment

University of Oregon (Eugene, Oregon), 1987, Graduate Certificate in School Administration

University of Idaho (Moscow, Idaho), 1974, Ph.D. in Secondary Education

EDUCATION CREDENTIAL:

Idaho Education Credential with *administrator endorsements* for superintendent and principal (PreK-12), and *secondary teaching endorsements* for mathematics, German, English, and psychology. Expires September 1, 2017.

SELECT NAEP-RELATED PRESENTATION AND PUBLICATIONS:

Stoneberg, B.D. (2007, June). *An explanation for the large differences between state and NAEP "proficiency" scores reported for reading in 2005*. Paper presented at the Council of Chief State School Officers (CCSSO) 37th Annual National Conference on Large-Scale Assessment, Nashville, TN. Available online: <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED497395>

Stoneberg, B.D. (2007). Using NAEP to confirm state testing results in the No Child Left Behind Act. *Practical Assessment, Research & Evaluation*, 12(5). Available: <http://pareonline.net/genpare.asp?wh=4&abt=stoneberg>

Stoneberg, B.D. (2005). Please don't use NAEP scores to rank order the 50 states. *Practical Assessment, Research & Evaluation*, 10(9). Available: <http://pareonline.net/genpare.asp?wh=4&abt=stoneberg>