Florida Department of EDUCATION

NAEP FLORIDA
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

PIRLS

TIMSS USA

PISA USA

NAEP and International Assessments

August 28, 2013
DAC Annual Meeting

NAEP and International Assessments in Florida

Legislative Mandate

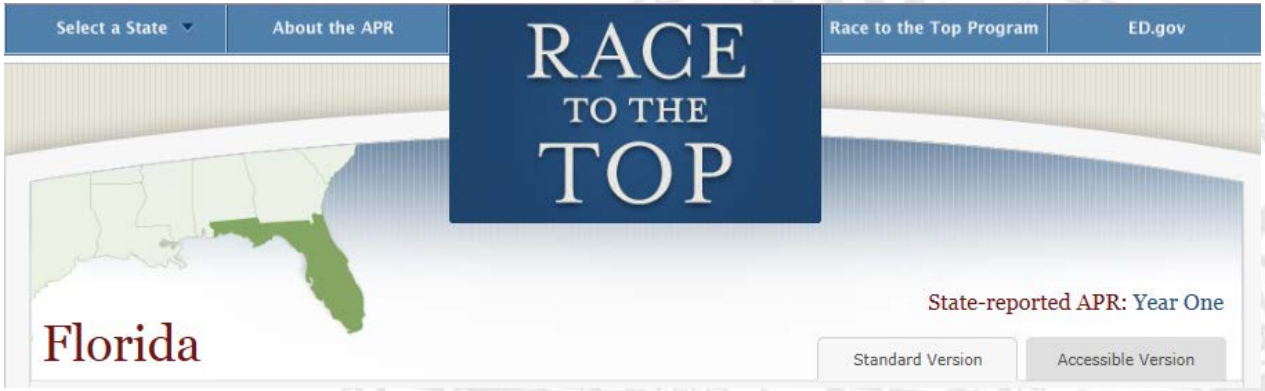
Florida State Statute 1008.22 (2)

"The Commissioner of Education shall direct Florida school districts to participate in the administration of NAEP, or similar national or international assessment program..."

Florida Department of EDUCATION

Race to the Top Initiatives

International Assessments



- Florida participated in international linking and benchmarking studies for TIMSS, PIRLS, and PISA in 2011 and 2012
- Goal: to make international comparisons of student achievement, analyze progress, determine prioritized areas of needed improvement, and adjust priorities for development of resources and strategies

Florida Department of EDUCATION

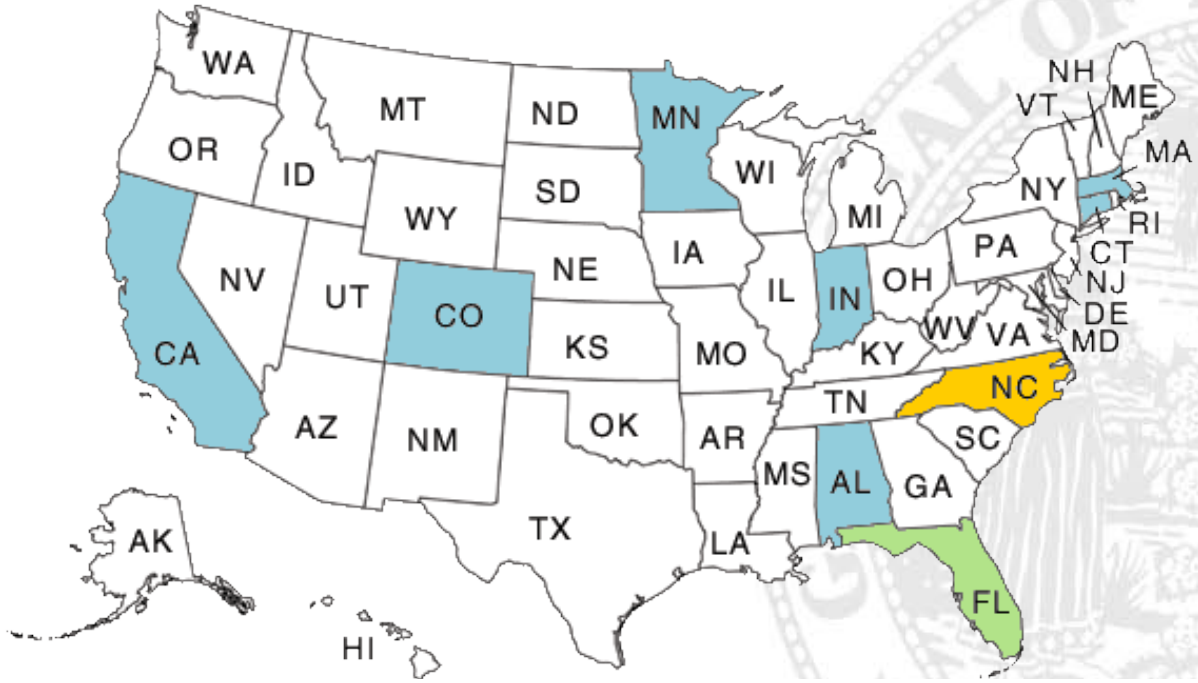
NAEP and International Assessments

	PIRLS	TIMSS	PISA	NAEP
Assessment Title	Progress in International Reading Literacy Study	Trends in International Mathematics and Science	Program for International Student Assessment	National Assessment of Educational Progress
What is assessed?	Reading Literacy	Mathematics and Science	Reading, mathematics, and scientific literacy, with one subject assessed in depth at each administration (on a rotating basis) and the other two subjects as minor domains.	Mathematics and reading are assessed at the state-level every other year, in odd-numbered years. Science is assessed every four years, in odd-numbered years.
What year did the study begin?	2001	1995	2000	1969 National; 1990 State
How often is the study conducted?	Every 5 years	Every 4 years	Every 3 years	Main NAEP every 2 years, in odd-numbered years
When was the study last administered?	Spring 2011	Spring 2011	Fall 2012	Winter 2013
When were/will results be available?	December 11, 2012	December 11, 2012	Winter 2013/2014	October 2013, grades 4 and 8 March 2014 , grade 12
When will the study be conducted next?	Spring 2016	Spring 2015	Fall 2015	2014 National; 2015 State
What is the target population?	Fourth-graders	Fourth- and eighth-graders	15-year-olds	Fourth-, eighth-, and twelfth-graders
How many U.S. participants were in the most recent study?	15,361	Grade 4: 17,051 Grade 8: 30,254	11,725	Grade 4: 401,800 Grade 8: 322,200
How many jurisdictions usually participate in the assessment?	53 education systems	Grade 4: 57 total Grade 8: 56 total	65 education systems	50 states, DC, DOD
Are state-level data available?	Yes, Florida received state-level data for PIRLS 2011.	Yes, for a few participating states in 1999, 2007, and 2011. For TIMSS 2011*, nine states received state-level data (AL, CA, CT, CO, FL, IN, MA, MN, and NC).	Yes, Connecticut, Florida, and Massachusetts will receive state-level data for PISA 2012.	Yes
Are district-level data available?	No	Yes, for a few participating districts in 1995, 1999, and 2011. Hillsborough and Miami-Dade will receive projected TIMSS scores in mathematics.	No	Yes, for 21 Trial Urban Districts, including Hillsborough and Miami-Dade.
Web address?	http://timssandpirls.bc.edu/	http://timssandpirls.bc.edu/	http://nces.ed.gov/surveys/pisa/	http://nces.ed.gov/nationsreportcard/

* State-level TIMSS data to be used to validate NAEP grade 8 mathematics and science scores.

Florida Department of EDUCATION

TIMSS and PIRLS 2011



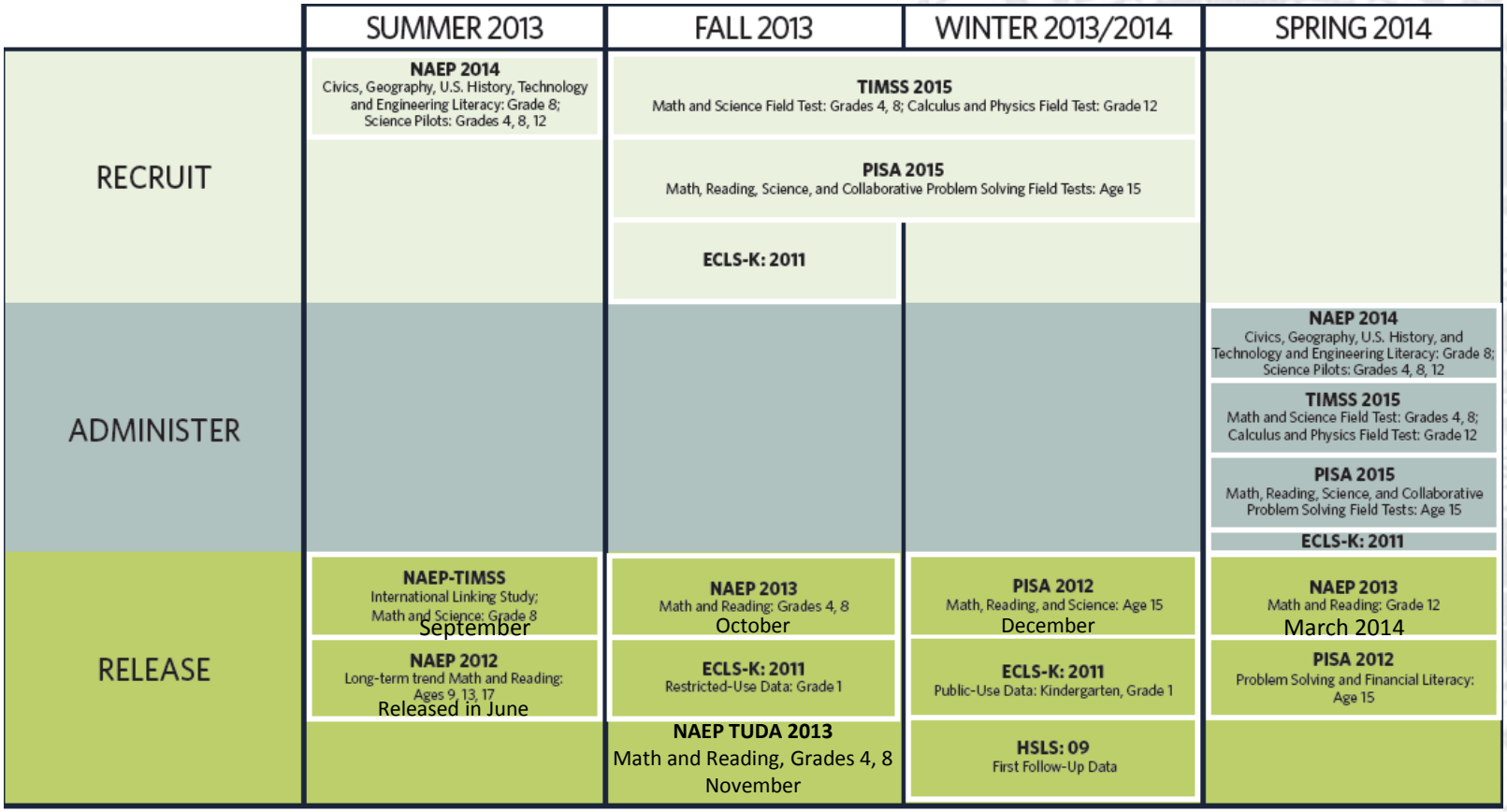
NAEP-TIMSS Linking Study Validation State

NAEP-TIMSS Linking Study Validation State; also participated in grade 4 state TIMSS at their own expense

Participated in state-level TIMSS (grades 4 & 8) and PIRLS (grade 4) at their own expense

Florida Department of EDUCATION

National and International Assessment Activities 2013-2014



ECLS-K: 2011	Early Childhood Longitudinal Study, Kindergarten Class of 2010-11
HSLS	High School Longitudinal Study
NAEP	National Assessment of Educational Progress

PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Assessment
TIMSS	Trends in International Mathematics and Science Study

Florida Department of EDUCATION

PIRLS 2011
53 Participating Education Systems

Florida Department of EDUCATION

Florida scored 2nd in the WORLD on grade 4 PIRLS!

Grade 4 PIRLS Reading	
Educational System	**Average Scale Score**
Hong Kong	571
Florida	**569**
Russian Federation	568
Finland	568
Singapore	567
Northern Ireland	558
U.S.	**556**
Denmark	554
Croatia	553
Chinese Taipei	553
Ontario Canada	552
Ireland	552
England	552
40 additional education jurisdictions	548 – 310

Not significantly different from U.S.

Florida Department of EDUCATION

TIMSS 2011
57 Participating Education Systems

Florida scores 9th in the WORLD on grade 4 TIMSS Mathematics!

Grade 4 TIMSS Mathematics	
Educational System	**Avg. Scale Score**
Singapore	606
Korea	605
Hong Kong	602
Chinese Taipei	591
Japan	585
Northern Ireland	562
North Carolina	554
Belgium	549
Florida	**545**
Finland	545
England	542
Russian Federation	542
United States	**541**
Netherlands	540
Denmark	537
Lithuania	534
Quebec Canada	533
Portugal	532
Germany	528
Ireland	527
Ontario Canada	518
37 additional education jurisdictions	516 - 248

Not significantly different from the U.S.

Florida Department of EDUCATION

Florida's grade 8 TIMSS Mathematics average (513) not measurably different from 11 other education systems

Grade 8 TIMSS Mathematics	
Educational System	**Avg. Scale Score**
Korea	613
Singapore	611
Chinese Taipei	609
Hong Kong	586
Japan	570
Massachusetts	561
Minnesota	545
Russian Federation	539
North Carolina	537
Quebec	532
Indiana	522
Connecticut	518
Colorado	518
Israel	516
FInland	514
Florida	**513**
Ontario Canada	512
United States	**509**
England	507
Hungary	505
Alberta Canada	505
Australia	505
Slovenia	505
33 additional education jurisdictions	502-331

Not significantly different from the U.S.

Florida Department of EDUCATION

Florida scored 7th in the WORLD on grade 4 TIMSS Science!

Grade 4 TIMSS Science	
Educational System	**Avg. Scale Score**
Korea	587
Singapore	583
Finland	570
Japan	559
Chinese Taipei	552
Russian Federation	552
Florida	**545**
United States	**544**
North Carolina	538
Czech Republic	536
Hong Kong	535
Hungary	534
Sweden	533
Slovak Republic	532
Austria	532
Netherlands	531
England	529
Denmark	528
Germany	528
Ontario Canada	528
37 additional education jurisdictions	524 - 209

Not significantly different from the U.S.

Florida Department of EDUCATION

Florida's grade 8 TIMSS Science average (530) not measurably different from 10 other education systems

Grade 8 TIMSS Science	
Educational System	**Avg. Scale Score**
Singapore	590
Massachusetts	567
Chinese Taipei	564
Korea	560
Japan	558
Minnesota	553
Finland	552
Alberta -CAN	546
Slovenia	543
Colorado	542
Russian Federation	542
Hong Kong	535
England	533
Indiana	533
Connecticut	532
North Carolina	532
Florida	**530**
United States	**525**
Hungary	522
Ontario Canada	521
Quebec Canada	520
Australia	519
Israel	516
33 additional education jurisdictions	514-306

Not significantly different from the U.S.

Florida Department of EDUCATION

Summary of International Performance

	PIRLS Gr 4 Reading	TIMSS GR 4 Mathematics	TIMSS GR 8 Mathematics	TIMSS GR 4 Science	TIMSS GR 8 Science
Number of Participating Education Systems	53	57	56	57	56
Where did Florida place?	2nd	9th	16th	7th	17th
Where did U.S. place?	7th	13th	18th	8th	18th

Florida Department of EDUCATION

International Data Explorer

http://nces.ed.gov/surveys/international/ide

- Analyzes TIMSS, PIRLS, and PISA data
- Creates statistical tables and graphs
- Compares the performance of the U.S. with that of the other participating jurisdictions

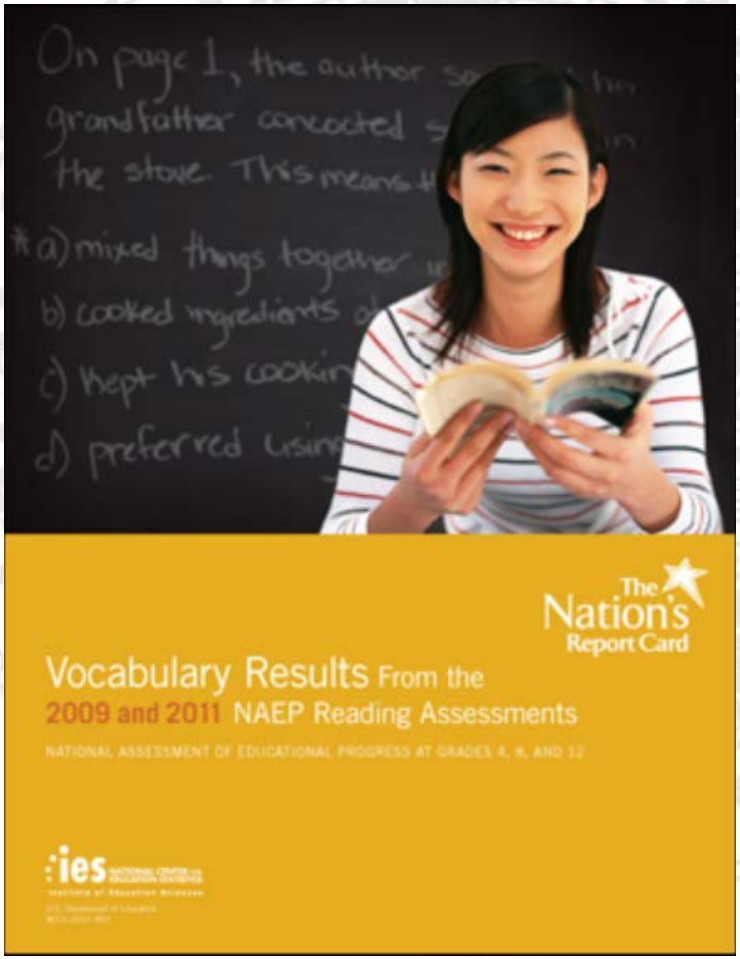
Florida Department of EDUCATION

NAEP

- Largest nationally representative assessment of what our nation's students know and can do
- Results are released as The Nation's Report Card
- Has been congressionally authorized and funded since 1969
- Expanded from a national to a state-level assessment in 1990
- Expanded to begin including large urban districts in 2002
- Reports on the status and progress of student achievement in core subjects at grades 4, 8, and 12
- Provides results to help develop ways to improve education in the U.S.

NAEP Vocabulary 2009 and 2011

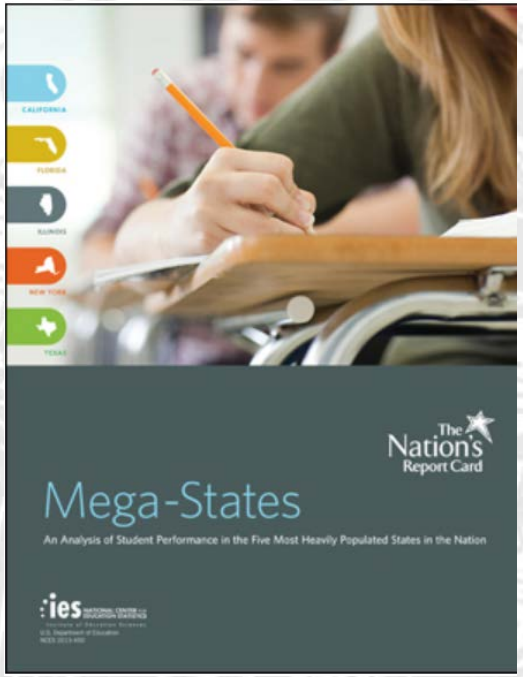
- Report released December 6, 2012
- Florida's grade 4 public school students scored significantly higher than the nation in 2009 and 2011
- Only 6 states had grade 4 students who scored significantly higher than Florida in 2011 – MA, MD, ND, NH, PA, VA
- No states had Hispanic students scoring significantly higher than Florida in 2011 at grade 4 or 8
- http://nces.ed.gov/nationsreportcard/pubs/main2011/2013452.asp and http://www.fldoe.org/asp/naep/pdf/09-11vocab.pdf



Florida Department of EDUCATION

Mega-States Report

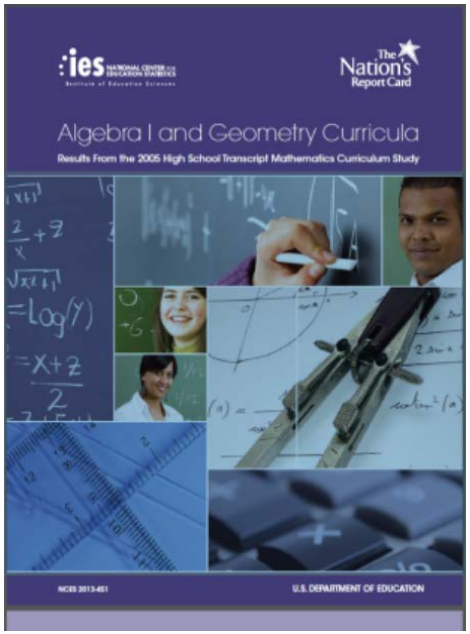
- Report released February 21, 2013
- Compared scores from the 5 states that, together, educate more than 1/3 of the nation's students
- Grades 4 and 8 in mathematics, reading, and science
- Florida students posted a greater gain on the **grade 4 reading** assessment between 1992 and 2011 than CA, NY, TX, and the nation
- In 2011, 22% of Florida's **grade 8** Hispanic students scored at or above *Proficient* on NAEP **mathematics** – significantly higher than CA and NY



- In 2009, 23% of Florida's **grade 4** Hispanic students scored at or above *Proficient* on NAEP **science** – significantly higher than the nation and the other Mega States
- http://nces.ed.gov/nationsreportcard/pdf/main2011/2013450.pdf

Florida Department of EDUCATION

2005 High School Transcript Mathematics Curriculum Study

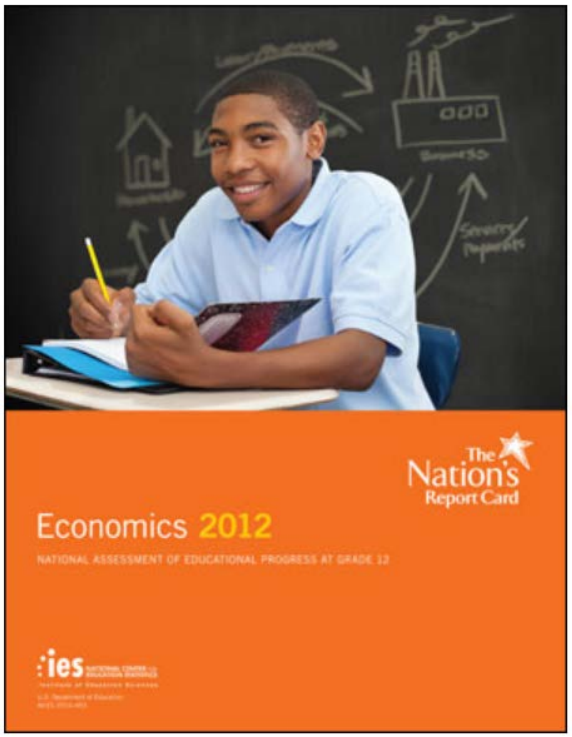


- Report released March 12, 2013 – only national results
- High school graduates in 2005 earned more mathematics credits, took higher-level mathematics courses, and obtained higher grades in mathematics courses than in 1990
- School course titles often overstated course content and challenge
- Less than 20% of graduates who took an "honors" algebra 1 course actually received a rigorous curriculum
- Only 33% of graduates who took an "honors" geometry course received a rigorous curriculum

- At least 10% of high school algebra 1 and geometry class content focused on elementary and middle school mathematics topics, regardless of rigor
- Course level definitions based on curriculum topics covered and level of challenge posed to students as stated in summaries of textbook content
- http://nces.ed.gov/nationsreportcard/pdf/studies/2013451.pdf

Florida Department of EDUCATION

NAEP Economics 2012 – Grade 12



- Report released April 24, 2013 - only national results
- Measured understanding of market, national, and international economy
- Hispanic students scored higher in 2012 than in 2006, and a larger percentage performed at or above *Basic*
- Between 2006 and 2012, there was a decrease in the percentage of students scoring below Basic and an increase in the percentage of students scoring at or above *Basic*
- http://nces.ed.gov/nationsreportcard/pubs/main2012/2013453.aspx

Florida Department of EDUCATION

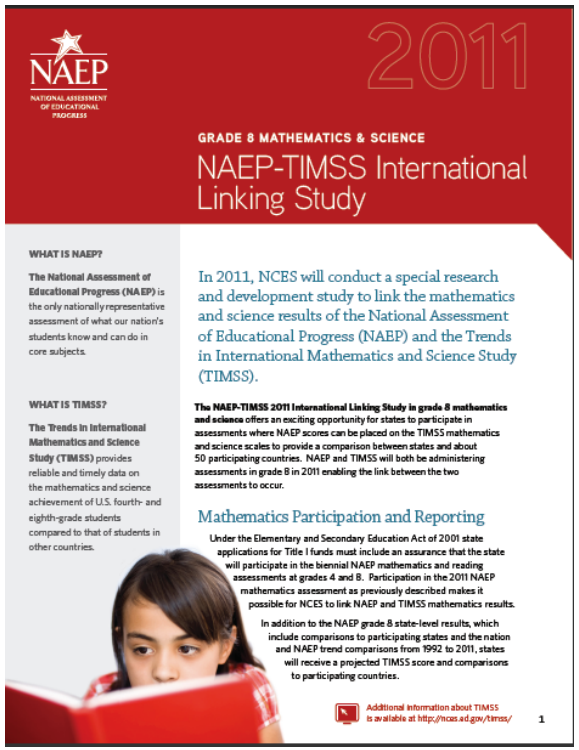
Trends in Academic Progress

- Report released June 27, 2013 - only national results
- Both 9- and 13-year olds scored higher in reading and mathematics in 2012 than students their respective ages in the early 1970s
- 17-year-olds showed no significant change since 1971, the first year the NAEP Long-term Trend assessment was administered
- Since the last administration in 2008, only 13-year-olds made gains, and they did so in both mathematics and reading

- http://nces.ed.gov/nationsreportcard/pubs/main2012/2013456.aspx

Florida Department of EDUCATION

NAEP-TIMSS 2011 LINKING STUDY



NAEP
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

2011

GRADE 8 MATHEMATICS & SCIENCE

NAEP-TIMSS International Linking Study

WHAT IS NAEP?

The National Assessment of Educational Progress (NAEP) is the only nationally representative assessment of what our nation's students know and can do in core subjects.

WHAT IS TIMSS?

The Trends in International Mathematics and Science Study (TIMSS) provides reliable and timely data on the mathematics and science achievement of U.S. fourth- and eighth-grade students compared to that of students in other countries.

In 2011, NCES will conduct a special research and development study to link the mathematics and science results of the National Assessment of Educational Progress (NAEP) and the Trends in International Mathematics and Science Study (TIMSS).

The NAEP-TIMSS 2011 International Linking Study in grade 8 mathematics and science offers an exciting opportunity for states to participate in assessments where NAEP scores can be placed on the TIMSS mathematics and science scales to provide a comparison between states and about 50 participating countries. NAEP and TIMSS will both be administering assessments in grade 8 in 2011 enabling the link between the two assessments to occur.

Mathematics Participation and Reporting

Under the Elementary and Secondary Education Act of 2001 state applications for Title I funds must include an assurance that the state will participate in the biennial NAEP mathematics and reading assessments at grades 4 and 8. Participation in the 2011 NAEP mathematics assessment as previously described makes it possible for NCES to link NAEP and TIMSS mathematics results.

In addition to the NAEP grade 8 state-level results, which include comparisons to participating states and the nation and NAEP trend comparisons from 1992 to 2011, states will receive a projected TIMSS score and comparisons to participating countries.

Additional information about TIMSS is available at http://nces.ed.gov/timss/

1

- Report will be released mid-September
- Study designed to link national and international assessments at grade 8 in mathematics and science
- NAEP results were projected onto the TIMSS scoring scales, allowing states to receive projected TIMSS scores and a comparison between individual states and the 50-plus countries that participated in TIMSS
- The 21 TUDAs will receive projected TIMSS scores in mathematics
- Actual TIMSS scores for Florida and the other 8 states that participated in state-level TIMSS will be compared to their projected TIMSS scores to ensure the validity of the study (AL, CA, CO, CT, FL, IN, MA, MN, and NC)

- http://nationsreportcard.gov/

Florida Department of EDUCATION

Governor Uses NAEP Results

NAEP[7]			
4th Grade Math	Average Score Change[8], 1992-2011	+26 ★	+26 ★
8th Grade Math		+18 ★	+8
4th Grade Reading		+17 ★	+12
8th Grade Reading	Average Score Change, 1998-2011	+7 ★	+7 ★
8th Grade Science	Average Score Change, 2009-2011	+2 ★	+1

Florida vs. Kentucky EDUCATION REPORT CARD

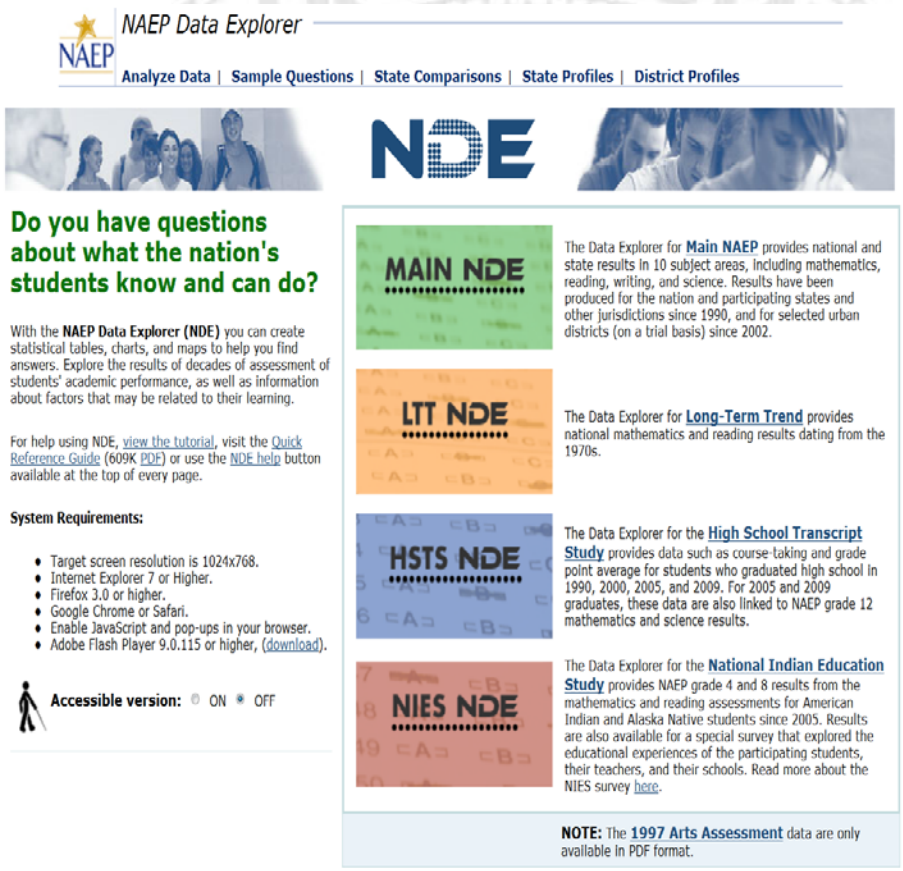
What's Working TODAY

		Florida	Kentucky
StudentsFirst's State Policy Report Card 2012[1]			
Overall	Grade	B- ★	D-
	GPA	2.73 ★	0.88
	Rank	2 ★	35
Elevating Teaching	Grade	A- ★	D+
	GPA	3.67 ★	1.41
	Rank	2 ★	25
Empowering Parents	Grade	C- ★	F
	GPA	1.94 ★	0.00
	Rank	4 ★	44
Spend Wisely & Govern Well	Grade	C ★	D
	GPA	2.00 ★	1.22
	Rank	13 ★	34
Advanced Placement[2]			
Participation[3]	2012	52.9% ★	31.8%
	Rank	1 ★	20
Performance[4]	2012	27.8% ★	15.6%
	Rank[5]	4 ★	26
Change in Performance 2002-2012[6]	% point change	12.9% ★	9%
	Rank	2 ★	13
NAEP[7]			
4th Grade Math	Average Score Change[8], 1992-2011	+26 ★	+26 ★
8th Grade Math		+18 ★	+8
4th Grade Reading		+17 ★	+12
8th Grade Reading	Average Score Change, 1998-2011	+7 ★	+7 ★
8th Grade Science	Average Score Change, 2009-2011	+2 ★	+1
2013 Quality Counts[9]			
Overall	Grade	B- ★	B- ★
	Average Score	81.1 ★	80.1
	Rank	6 ★	10
NCTQ State Teacher Policy Yearbook[10]			
Delivering Well-Prepared Teachers	2012	B- ★	C+
	2011	B- ★	C-
High School Graduates			
Number of Graduates[11]	% Change, 1999-00 to 2010-11	53.3% ★	13.8%
Four-Year Colleges & Universities			
Four-Year Graduation Rate[12]		33.8% ★	20.5%
Six-Year Graduation Rate[13]		61.4% ★	46.9%
Degree Completions per 100 Students[14]		21.8 ★	18.8
Education Spending per Completion[15]		$40,505 ★	$75,415
Freshman-to-Sophomore Retention Rate[16]		86.5% ★	78.8%
In-State Tuition[17]		$6,232 ★	$8,455
Two-Year Colleges			
Two-Year Graduation Rate[18]		32.5% ★	18.4%
Three-Year Graduation Rate[19]		52.5% ★	27.4%
Degree Completions per 100 Students[20]		19.8 ★	17.5
Education Spending per Completion[21]		$23,269 ★	$18,661
Freshman-to-Sophomore Retention Rate[22]		69.7% ★	60.6%
In-State Tuition[23]		$3,100 ★	$4,201

Florida Department of EDUCATION

NAEP Data Explorer

- Analyzes NAEP data
- Creates statistical tables, graphics, and maps
- Compares the performance of jurisdictions and evaluates trends over time
- Shows possible relationships between variables and student performance
- http://nces.ed.gov/nationsreportcard/naepdata/



NAEP 2014

January 27 – March 7, 2014, in 19 districts

Grade and Type of Assessment	Target Sample Size
Grade 4 (Science paper and pencil or Hands-On Tasks)	56*
Grade 8 (U.S. History, Civics, Geography, Science paper and pencil)	100**
Grade 8 (Technology and Engineering Literacy [TEL])	30***
Grade 12 (Science paper and pencil or Hands-On Tasks)	56*

*If a grade 4 or grade 12 school has 62 or fewer students, the school can choose to have all of the students assessed.

**If a grade 8 school has 110 or fewer students, all of the students will be assessed.

***TEL sessions are administered in two sequential sessions of up to 15 students each on NAEP laptops.

Florida Department of EDUCATION

NAEP 2014

Resources for participating schools http://www.fldoe.org/asp/naep/naep.asp

General Resources

- An Introduction to NAEP (PDF, 5MB)
- An Overview of NAEP (PDF, 306KB)
- NAEP Information for Parents
- What Every Parent Should Know About NAEP (PDF, 2MB)
- NAEP Information for Students
- NAEP Policies for Accommodations
- NAEP Frequently Asked Questions
- NAEP Newsletter (PDF, 214KB)

Main NAEP 2014 - Grades 4, 8, and 12

The 2014 NAEP administration of all will be January 27-March 7, 2014. If you have any problems accessing

School Resources

School Principal Documents and Publications

- Facts for Principals (PDF, 690KB)

School NAEP Coordinator Documents and Publications

- Technology and Engineering Literacy Assessment
  - What Will the NAEP Technology and Engineering Literacy Assessment Measure? (PDF, 238KB)
  - NAEP in Your School for Technology and Engineering Literacy (TEL) (PDF, 265KB)
  - Technology and Engineering Literacy Assessment Information Sheet (PDF, 279KB)
- NAEP in Your School for Civics, Geography, and U.S. History (PDF, 264KB)
- NAEP in Your School for Science Pilots (PDF, 279KB)

Accommodation and Inclusion Documents

- Inclusion Fact Sheet (PDF, 389KB)

Parent/Guardian Letters and Newsletter

- School Parent/Guardian Notification Letter Confirmation Form (PDF, 39KB)

Best Practices, Guide for Supporting Twelfth-Grade NAEP Participation

Best practices documents and guide will be available in November.

District Resources

- NAEP Facts for Districts (PDF, 564KB)
- DAC Letter, July (Word, 557KB)
- Principal Letter, July (Word, 52KB)
- District Assessment Coordinator Parent/Guardian Letter Receipt Form (PDF, 53KB)

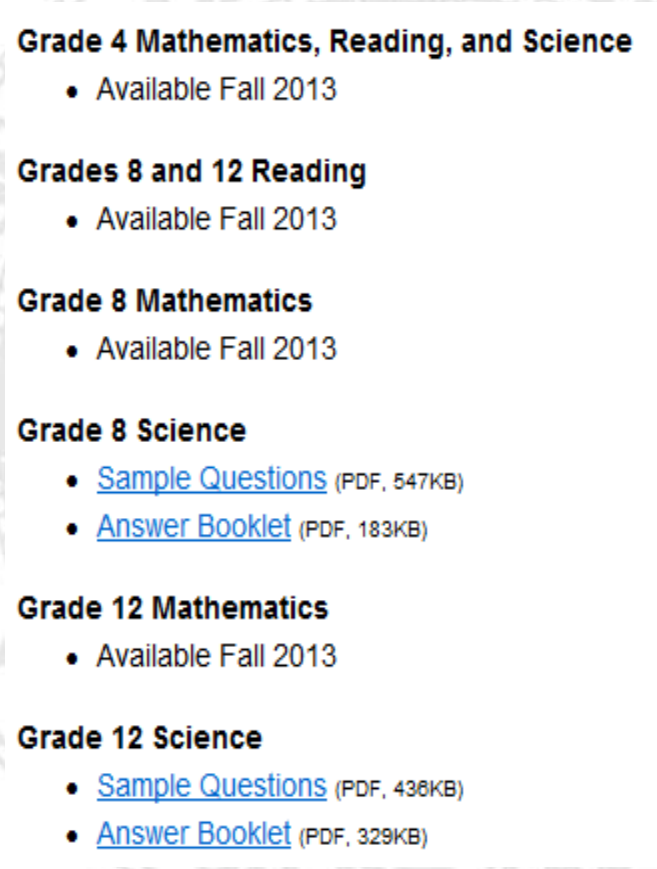
TIMSS 2014 Field Test

- Six schools each at grades 4, 8, and 12
- Grades 4 and 8 – mathematics and science
- Grade 12 – advanced mathematics and physics
- Will take place between mid-March and mid-May 2014

Florida Department of EDUCATION

NAEP Questions and Common Core

Sample NAEP Tests, Answers, and corresponding Common Core State Standards (Mathematics and Reading) and Next Generation Sunshine State Standards (Science) can be found at http://www.fldoe.org/asp/naep/naep-pt.asp



Grade 4 Mathematics, Reading, and Science

- Available Fall 2013

Grades 8 and 12 Reading

- Available Fall 2013

Grade 8 Mathematics

- Available Fall 2013

Grade 8 Science

- Sample Questions (PDF, 547KB)
- Answer Booklet (PDF, 183KB)

Grade 12 Mathematics

- Available Fall 2013

Grade 12 Science

- Sample Questions (PDF, 436KB)
- Answer Booklet (PDF, 329KB)

NAEP Questions Tool

http://nces.ed.gov/nationsreportcard/itmrls

- Contains over 1,000 released items from many content areas
- Sorts items by domains, objectives, cognitive ability, and difficulty level
- Includes multiple-choice and both short- and extended-response items
- Reports student performance on a specific question by states and subgroups

Florida Department of EDUCATION

Michele Sonnenfeld,
NAEP State Coordinator
Florida Department of Education
325 W. Gaines Street, Room 414
(850) 245-0787
FAX (850) 245-0771
Michele.Sonnenfeld@fldoe.org
http://www.fldoe.org.asp.naep

NAEP FLORIDA
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

Florida Department of EDUCATION