#### THE NATION'S REPORT CARD

# Reading and Math 2013 Trial Urban District Assessment (TUDA)

Grades 4 and 8

#### Jefferson County Public Schools

January 13, 2014

**Robert Rodosky** 



#### What is NAEP?

- National Assessment of Educational Progress
- Also known as the Nation's Report Card
- Designed to measure
   progress on a national,
   regional, state and district
   levels.

More information about NAEP and TUDA available at:

http://nationsreportcard.gov/



Shapina the Future

#### What is TUDA?

- Trial Urban District Assessment
- Began in 2002 as a means to gauge assessment progress on a large, urban district level, similar to state level assessment.
- As of 2013, 21 districts are participating in TUDA and were assessed in Reading and Math

#### **TUDA** Districts





## How are districts selected for TUDA?

- Feasibility of conducting NAEP over a range of characteristics:
  - District located in a large city (population of 250,000 or more)
  - Sufficient student population to support a three-subject assessment at grades 4 and 8
  - Have a majority of students meeting at least one of the following:
    - African American or Hispanic
    - Eligible for participation in National School Lunch Program
  - Eligible districts are invited to volunteer

## How are students assessed for TUDA?

- A sample of students were randomly selected by NAEP to accurately reflect the demographics of JCPS.
- Number of Students tested from Jefferson County:

Subject	Grade 4 Students	Subject	Grade 8 Students		
Reading	1,600	Reading	1,400		
Math	1,600	Math	1,400		
Grand Total of Students: 6,000					

• Students, in the same class, were given a Reading **or** a Math assessment.



## Have students in urban districts made progress since 2011?

JCPS along with 10 other districts saw no significant change from 2011

Change between 2011 and 2013 NAEP mathematics and reading average scores for fourth- and eighth-grade public school students, by jurisdiction

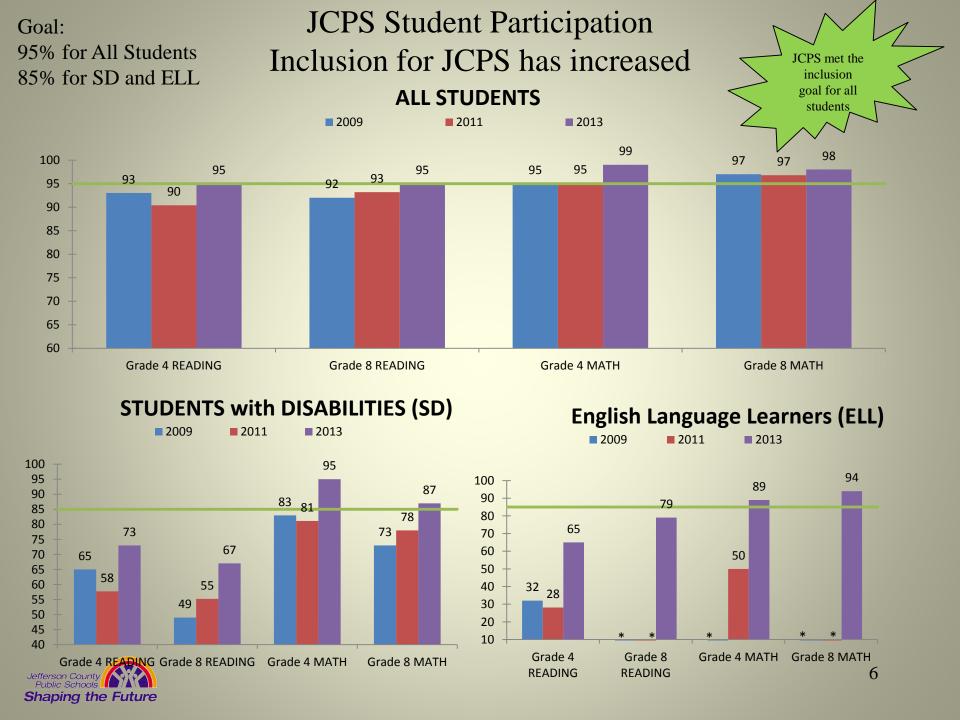
	Math	nen	natic	3	Reading			
Jurisdiction	Grade 4	+	Grade 8		Grade 4		Grade 8	
Nation (public)	<b>1</b> 1	Ĺ	*	1	0	1	1	2
Large city	<b>1</b> 2	2		2	0	2	*	3
Albuquerque	♦ -1	L		-1	-	-2	0	2
Atlanta	<b>*</b> 5	5		1	-	3	0	2
Austin	◆ #	ŧ		-2	-	-3	0	#
Baltimore City	♦ -3	3		-2	-	4	*	6
Boston	◆ #	ŧ		2	-	-3	0	2
Charlotte	◆ #	ŧ	*	4	-	2	0	2
Chicago	<b>1</b> 7	7		-1	-	3		1
Cleveland	#		.0	-3	-	-3	0	-1
Dallas	• 1			#	-	1	*	4
Detroit	4 1	L	-	-6	-	-1	0	3
District of Columbia (DCPS)	<b>1</b> 7	7	*	5	•	5	*	8
Fresno	2	2	*	4	-	2	*	7
Hillsborough County (FL)	♦ -1	L		2	-	-3	0	3
Houston	♦ -1	L		1	-	-5	0	#
Jefferson County (KY)	♦ -2	2		-1	-	-2	0	1
Los Angeles	<b>*</b> 5	5		4	•	4	*	4
Miami-Dade	2	2		2	-	2	0	-1
Milwaukee	2	2		3	-	3	0	3
New York City	4 1	L		2	-	#	0	2
Philadelphia	♦ -2	2		2	-	1	0	2
San Diego	• 2	2		-2	-	2	0	4



Higher average score in 2013.

Lower average score in 2013.

No significant difference between 2011 and 2013.



# READING HOW DID WE DO?

- Average Scale Scores
- At or Above Basic
- At or Above Proficient



### 2013 TUDA Reading

Scored Higher than Scored the Same as Scored Lower than **JCPS** 

JCPS scored higher than 15 districts and Large City in both grades 4 and 8.

Grade 4 2013 Average Scale Scores				
Hillsborough County (FL)	>	228		
Charlotte	>	226		
Kentucky	>	224		
Miami-Dade	x	223		
Jefferson County (KY)		221		
Austin	x	221		
National public	x	221		
San Diego	х	218		
New York City	<	216		
Boston	<	214		
Atlanta	<	214		
Large city	<	212		
Houston	<	208		
Albuquerque	<	207		
Chicago	<	206		
District of Columbia (DCPS)	<	206		
Los Angeles	<	205		
Dallas	<	205		
Baltimore City	<	204		
Philadelphia	<	200		
Milwaukee	<	199		
Fresno	<	196		
Detroit	<	190		
Cleveland	<	190		

Grade 8 2013 Average Scale Scores					
Kentucky	>	270			
Hillsborough County (FL)	>	267			
Charlotte	>	266			
National public	>	266			
Austin	x	261			
Jefferson County (KY)		261			
San Diego	x	260			
Miami-Dade	x	259			
Large city	<	258			
Boston	<	257			
New York City	<	256			
Albuquerque	<	256			
Atlanta	<	255			
Chicago	<	253			
Houston	<	252			
Baltimore City	<	252			
Dallas	<	251			
Los Angeles	<	250			
Philadelphia	<	249			
District of Columbia (DCPS)	<	245			
Fresno	<	245			
Milwaukee	<	242			
Detroit	<	239			
Cleveland	<	239			

JCPS is one of the five districts to score above large cities at both Grades 4 and 8 in Reading



# 2013 TUDA Student Groups Performance in Reading (Average Scale Scores)

In both Grades 4 and 8 White students had average scale scores that was higher than the average scale scores of Black and Hispanic students

#### **GRADE 4**

	White	Black	GAP	Hispanic	GAP
Jurisdictions	Average scale scores	Average scale scores	Difference btwn. White and Black		Difference btwn. White and Hispanic
National public	221	205	-16	207	-14
Large city	212	202	-10	204	-8
Jefferson County (KY)	233	203	-30	221	-12

#### **GRADE 8**

	White	Black	GAP	Hispanic	GAP
Jurisdictions	Average scale scores	Average scale scores	Difference btwn. White and Black		Difference btwn. White and Hispanic
National public	275	250	-25	255	-20
Large city	276	246	-30	253	-23
Jefferson County (KY)	271	243	-28	258	-13

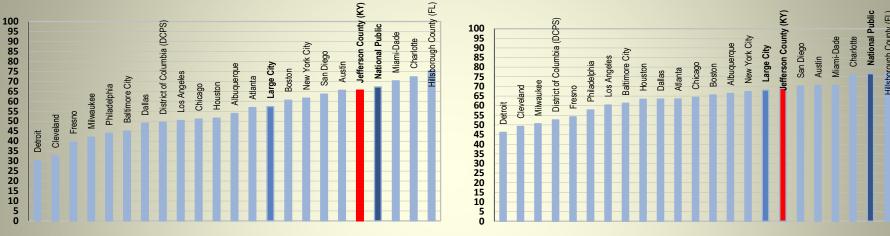


## 2013 TUDA Reading (At or Above Basic)

In 2013 JCPS students in grade 4 scored higher than 14 districts and in grade 8 students scored higher than 12 districts.







#### In the reading cohort students made gains in JCPS, Large City and Kentucky

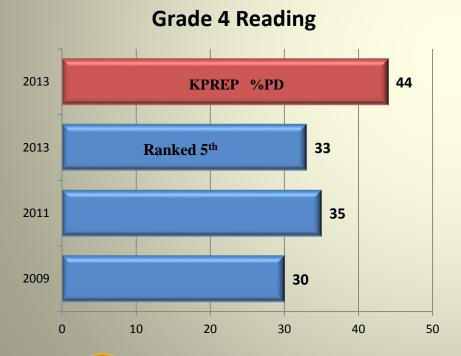
Cohort	JCPS	Large City	KY
Reading Grade 4 in 2009	64	54	72
Reading Grade 8 in 2013	69	68	80
Gains	5	14	8

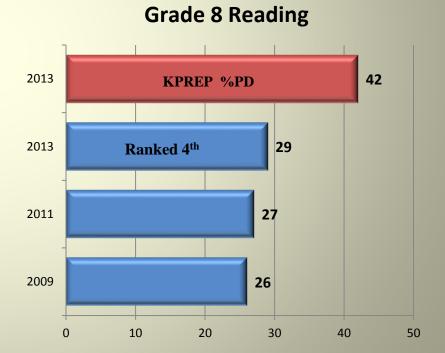


#### 2013 TUDA vs 2013 KPREP

# Percent (At or Above Proficient) in Reading

#### Is JCPS moving in the right direction?







# WHAT DOES THIS MEAN FOR READING?

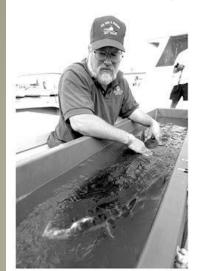
- Item Analysis
- Performance Level
- Next Steps



#### Sample Item - Grade 4

#### Little Great White

by Pamela S. Turner



A veterinarian gives the shark a checkup before her trip to the aquarium.

white sharks alive, but the sharks would not eat in captivity.

The baby shark had been caught accidentally by a halibut fisherman off the coast of Southern California, Mr. O'Sullivan and his team knew that white sharks were sometimes caught this way. The aquarium had a special floating pen waiting in coastal waters nearby. While the shark lived in the pen, she was fed the same things she would have eaten in the wild—smaller sharks and other fish. The floating pen helped her get used to living in a small space.

76% of Jefferson County Public School 4<sup>th</sup> graders correctly answered this question.

The national average of all students was 81%. JCPS students outperformed 16 TUDA districts.

- 4. On page 2, when the article says that the baby shark had been caught accidentally, this means that
  - A. the fisherman was not trying to catch a shark
  - B. the shark was hurt while it was being caught
  - C. the fisherman had used a special floating pen
  - D. the shark had bumped into the fishing boat

The correct answer is A.



## NAEP Reading Scale – Grade 4

```
500

//

340

268 Advanced

260

250

240

238 Proficient

230
```

226 Recognize description dialogue explicitly stated in a story—Locate/Recall (MC)

#### 221 JEFFERSON COUNTY PUBLIC SCHOOLS

220 Recognize best description of character based on action described in expository passage—Integrate/Interpret (MC)
220

214 Recognize author's main purpose for writing an expository passage—Integrate/Interpret (MC) 211 Recognize meaning of descriptive word used in an expository passage—Integrate/Interpret (MC)

0



## Sample Item – Grade 8

#### La Ñapa

(Description of passage)\*

"La Ñapa" is a story that explores the theme of cultural identity and the need to move beyond cultural stereotypes by first-hand experience. The story, an intact section taken from a longer book, recounts the feelings of a young boy as he travels to and arrives in the Dominican Republic. The story portrays his mixed feelings about Dominican culture, his family members, and the trip.

A young boy, Miguel and his sisters Juanita are taking their first trip to the Dominican Republic, from which their parents immigrated to the United States. They are being taken to the Dominican Republic for the Christmas holiday by their mother. Travelling with them is Tia Lola, their aunt who has spent most of her life in the Dominican Republic.

As the story open, Miguel is looking down from the window at the landscape coming into view as the plane moves closer and closer to their destination. Lost in anxious thought about what the island will be like, he doesn't listen to Tia Lola's lessons about Dominican culture. When the plane touches down he wishes that he had.

Waiting in the passport line, Miguel asserts his identity as an American, but as he looks around he realizes that he looks more like the Dominicans than his friends back in Vermont. Soon Miguel is surrounded by a crowd of cousins, aunts, and uncles. When one of his cousins asks him if he plays baseball, all Miguel's anxiety dissipates and he smiles.

65 % of Jefferson County Public School 8<sup>th</sup> graders correctly answered this question.

The national average of all students was 67%. JCPS students outperformed 13 TUDA districts.

- 5. When the plane lands, what does Miguel notice outside the window?
  - A. People standing in long lines
  - B. A mixture of old-fashioned and modern life
  - C. Many boys his own age among the crowds
  - D. Many cultures living together



## NAEP Reading Scale – Grade 8

```
500
     330
323 Advanced
    320
    310
    300
    290
281 Proficient
    280
```

275 Recognize relevant detail embedded in a story—Locate/Recall (MC)

270

262 Use information from expository passage to support evaluation of a description—Critique/Evaluate (CR)

#### **261 JEFFERSON COUNTY PUBLIC SCHOOLS**

258 Recognize explicitly stated fact from an expository passage—Locate/Recall (MC) 250 Recognize meaning of word as used in a story—Integrate/Interpret (MC)

250

#### 243 Basic

240

210

200

//

0



## Next Steps - Reading

- Collect and review data about JCPS student responses from the NAEP website
- Look for trends in student misconceptions and compare the NAEP student responses with student misconceptions identified on CASCADE assessments
- Work with ELA Specialists to identify components in our curriculum units and supporting materials that can be emphasized to eliminate gaps and misconceptions
- Use the NAEP released items to support our district assessments



## MATH HOW DID WE DO?

- Average Scale Scores
- At or Above Basic
- At or Above Proficient



#### 2013 TUDA MATH

Scored Higher than Scored the Same as Scored Lower than **JCPS** 

JCPS scored higher than 8 districts in Grade 4 and higher than 10 districts in Grade 8.

Grade 4 Average Scale Scores					
Charlotte	>	247			
Austin	>	245			
Hillsborough County (FL)	>	243			
Kentucky	>	241			
National public	>	241			
San Diego	>	241			
Miami-Dade	>	237			
Boston	>	237			
Houston	x	236			
New York City	x	236			
Large city	x	235			
Albuquerque	x	235			
Dallas	x	234			
Jefferson County (KY)		234			
Atlanta	x	233			
Chicago	x	231			
District of Columbia (DCPS)	<	229			
Los Angeles	<	228			
Philadelphia	<	223			
Baltimore City	<	223			
Milwaukee	<	221			
Fresno	<	220			
Cleveland	<	216			
Detroit	<	204			

Grade 8 Aver	age Scale	Scores
Charlotte	>	289
Austin	>	285
Hillsborough County (FL)	>	284
National public	>	284
Boston	>	283
Kentucky	>	281
Houston	>	280
San Diego	x	277
Large city	x	276
Dallas	x	275
Miami-Dade	x	274
Albuquerque	x	274
New York City	x	274
Jefferson County (KY)		273
Chicago	<	269
Atlanta	<	267
Philadelphia	<	266
Los Angeles	<	264
District of Columbia (DCPS)	<	260
Baltimore City	<	260
Fresno	<	260
Milwaukee	<	257
Cleveland	<	253
Detroit	<	240

JCPS math scores in both Grade 4 and 8 where lower than the nation and large city 19 Shaping the Future

# 2013 TUDA Student Groups Performance in Math (Average Scale Scores)

In both Grades 4 and 8 White students had average scale scores that was higher than the average scale scores of Black and Hispanic students

#### **GRADE 4**

	White	Black	GAP	Hispanic	GAP
Jurisdictions	Average scale scores		Difference btwn. White and Black		Difference btwn. White and Hispanic
National public	250	224	-26	230	-20
Large city	254	223	-31	229	-25
Jefferson County (KY)	245	220	-25	224	-21

#### **GRADE 8**

	White	Black	GAP	Hispanic	GAP
Jurisdictions	Average scale scores	Average scale scores	Difference btwn. White and Black		Difference btwn. White and Hispanic
National public	293	263	-30	271	-22
Large city	295	261	-34	269	-26
Jefferson County (KY)	285	257	-28	265	-20

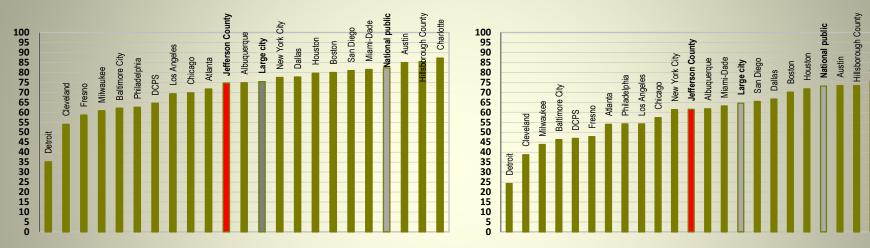


### 2013 TUDA MATH (At or Above Basic)

In 2013 grade 4 and grade 8 JCPS students scored lower than the Nation's Public Schools and not significantly different from Large City.

Grade 4 Percent At or Above Basic

Grade 8 Percent At or Above Basic



In the Math cohort students did not make gains in JCPS, Large City or Kentucky

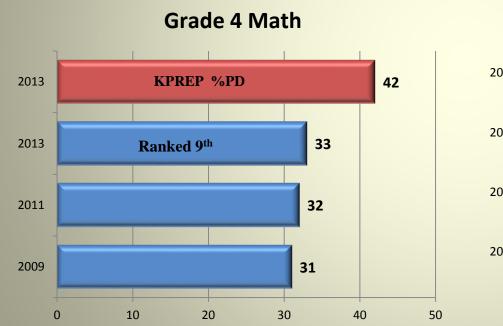
Cohort	JCPS	<b>Large City</b>	KY
Math Grade 4 in 2009	72	72	81
Math Grade 8 in 2013	61	65	71
Gains	-11	-7	-10

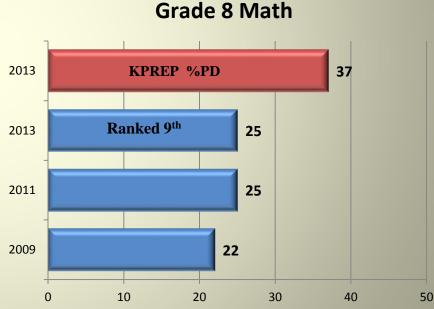


#### 2013 TUDA vs 2013 KPREP

## Percent (At or Above Proficient) in Math

#### Is JCPS moving in the right direction?





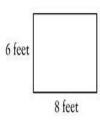


# WHAT DOES THIS MEAN FOR MATH?

- Item Analysis
- Performance Level
- Next Steps



### Sample Item - Grade 4



- 8. A teacher drew this rectangle on a playground. Sam walked around the rectangle on the lines shown. How far did Sam walk?
  - A. 14 feet
  - B. 20 feet
  - C. 28 feet
  - D. 48 feet

Shaping the Future

38% of Jefferson County Public School 4<sup>th</sup> graders correctly answered "C". While 43% chose "A" which was incorrect.

The national average of all students was 64%. JCPS did not score higher than the other districts.

1. 
$$4 \times 50 \times 9 =$$

A. 180

B. 360

C. 1,800

D. 3,600

66% of Jefferson County Public School 4th graders correctly answered "C".

The national average of all students was 75%. JCPS scored higher than six districts.

#### NAEP Mathematics Scale – Grade 4

```
500
//
340
300
290
282 Advanced
280
260
259 Use place value to find a sum (MC)
250
249 Proficient
```

240 Determine the sum of numbers represented on a number line (calculator available) (MC)

#### 234 JEFFERSON COUNTY PUBLIC SCHOOLS

234 Explain a property of divisibility—Partial (CR)
232 Compute the difference of two 4-digit numbers (MC)

230

220

#### 214 Basic

210

180

170

//

0



## Sample Item – Grade 8

Stacie rides her bike 3 miles in 12 minutes. At this rate, how long will it take her to ride her bike 7 miles?

- 22 minutes
- 28 minutes
- 36 minutes
- 43 minutes
- 84 minutes

70 % of Jefferson County Public School 8<sup>th</sup> graders correctly answered this question.

The national average of all students was 75 %. JCPS students outperformed 11 TUDA districts.



#### NAEP Mathematics Scale – Grade 8

0

```
500
                                     //
                                     350
                                     340
                               333 Advanced
                                     330
                                     320
                                     300
                               299 Proficient
   295 Use ratio to describe situation in context (calculator available) (MC)
                                    290
273 Compute with data from graph to solve problem (calculator available) (MC)
                  273 JEFFERSON COUNTY PUBLIC SCHOOLS
              272 Create a sequence given a rule—Correct (CR)
                                    270
      269 Use letters to represent unknown quantity in expression (MC)
    265 Solve a problem using unit conversions (calculator available) (MC)
                                  262 Basic
        257 Solve a problem involving rates (calculator available) (MC)
                                    250
                                    220
                                    210
                                     //
```



## Next Steps - Math

- Collect and review data about JCPS student responses from the NAEP website
- Look for trends in student misconceptions and compare the NAEP student responses with student misconceptions identified on CASCADE assessments
- Use this data to inform our curriculum work and professional development with teachers



## QUESTIONS?

