

Using Data to Improve Student Outcomes: New York City's Children First Reforms

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**Senate Committee on Education
Middle Grades Hearing
Austin, Texas
April 21, 2010**

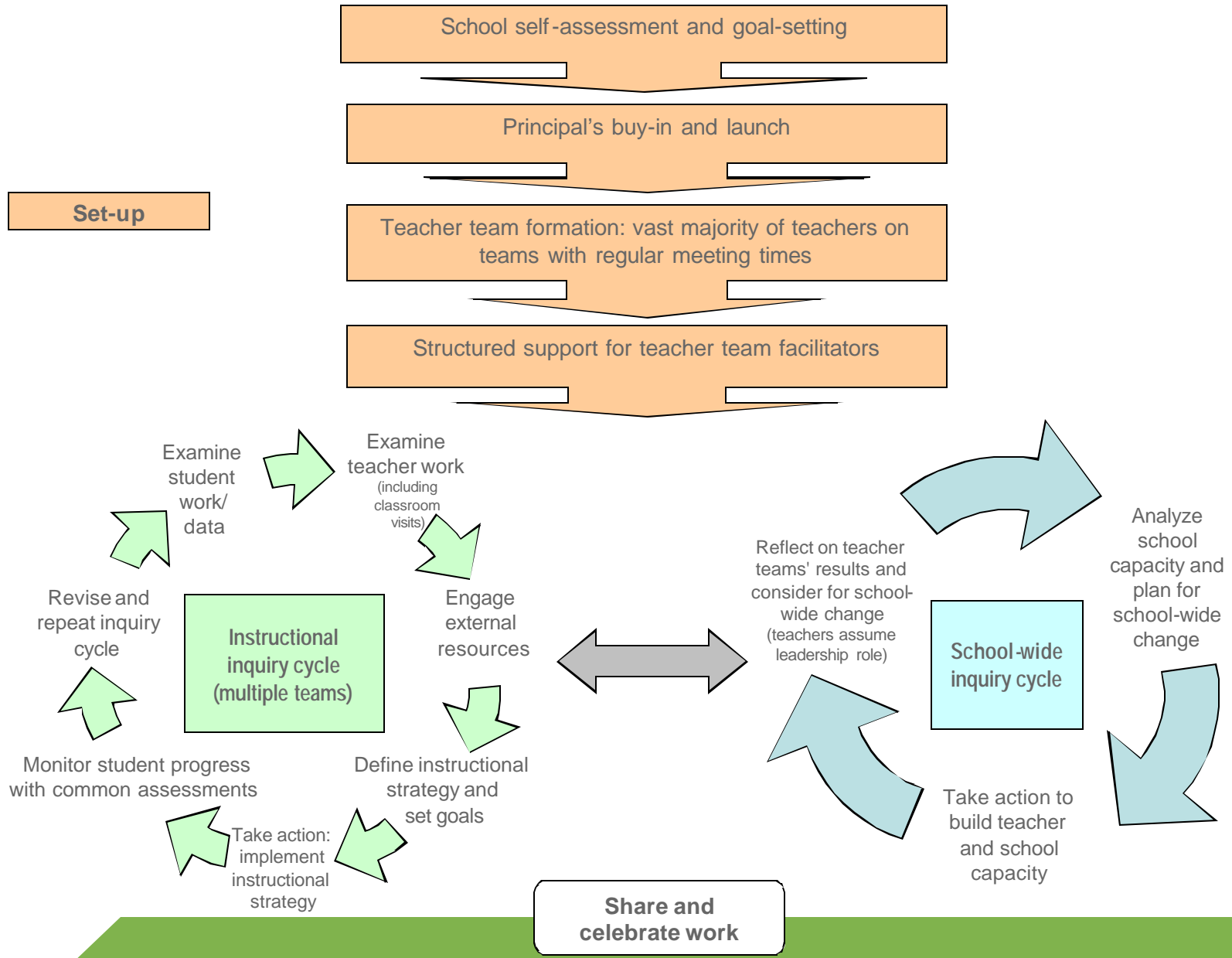
NYC'S Children First Reforms

- Leadership: An organization needs great leaders at all levels to be successful. Principals are key school-based decision makers and they must be empowered to make informed decisions and take smart risks. They, in turn, empower teachers to share in the instructional leadership of the school
- Empowerment: This means giving the people best equipped to make decisions the freedom they need to decide and the tools they need to make informed decisions—and then hold them accountable for helping each student make progress. Principals have also gained control over increased devolved funds.
- Accountability and Achievement Resources: Empowerment and accountability are mutually reinforcing principles. Empowered principals have the authority they need to make key decisions, and in return, agree to be held accountable for the learning outcomes of their students. Accountability includes the support and resources educators need in order to accelerate the learning of all children.

Accountability and Achievement Resources

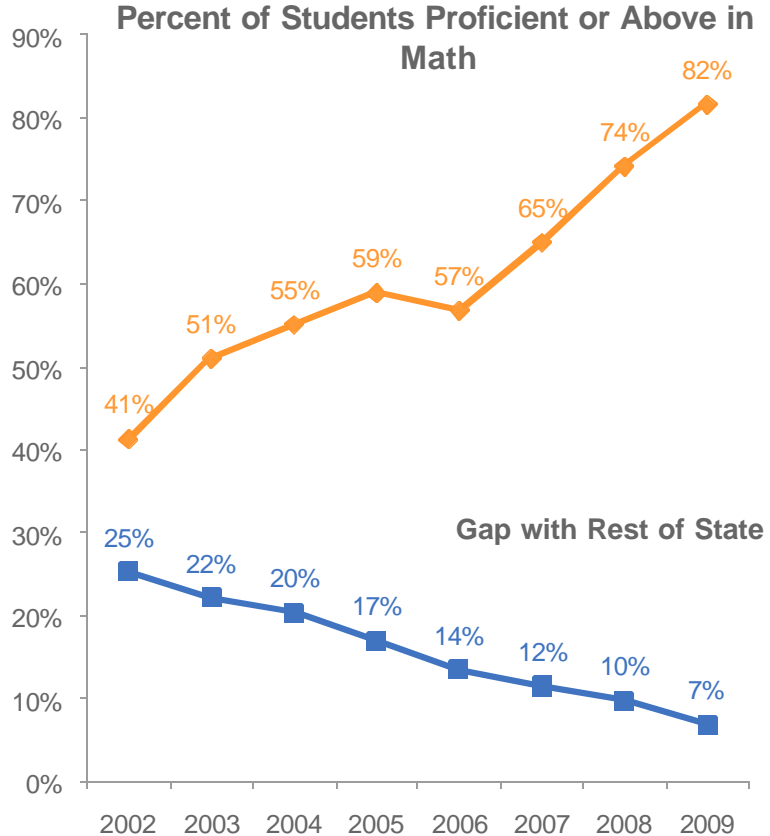
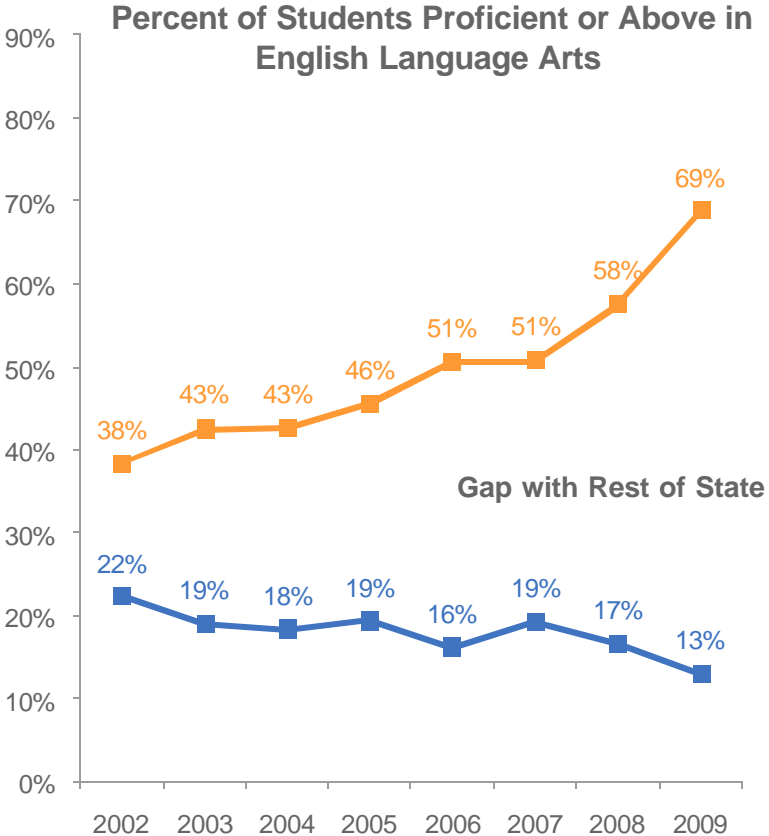
WHAT	EVALUATE	ENFORCE CONSEQUENCES	ENABLE
HOW	<p>Progress Reports Schools graded A-F each year based on student outcomes</p> <p>Quality Reviews Scores based on quality of strategies for improved outcomes</p> <p>Learning Environment Survey Parent, teacher, and student surveys about school environment</p> <p>Federal and State Evaluation Measures of schools' Adequate Yearly Progress and accountability standing</p>	<p>Rewards Monetary bonuses</p> <p>Consequences Immediate restructuring of chronically failing schools. Target setting for other D/F schools; if no improvement, leadership change after 2 and closure after 4 years</p> <p>Aligned Mechanisms City and school-network performance targets, Principals' Performance Review and bonuses, school-wide teacher performance bonuses</p>	<p>Periodic Assessments Diagnose and track progress</p> <p>Achievement Reporting and Innovation System (ARIS - Data) Fully integrated knowledge and data management</p> <p>Knowledge Management (ARIS – Resources) Support structures and tools for collaboration and knowledge sharing</p> <p>Children First Intensive Hands-on data training through Inquiry Teams</p>

Enabling Improved Learning Outcomes: Inquiry Teams



More NYC Students Are Meeting or Exceeding State Standards, and NYC Has Closed the Gap Considerably with the Rest of the State

(NYC is 73% Black/ Hispanic, 84% low income; Rest of State is 23% Black/ Hispanic, 31% low income*)

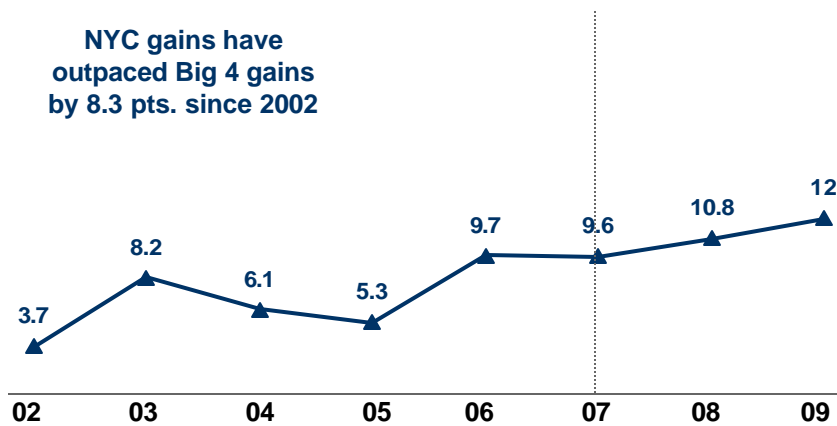


Note: Results reflect State tests in grades 4 and 8 from 2002-2005 and grades 3-8 from 2006-09. State tests were rescaled in 2005/06 as well as expanded to include all grades 3-8. State testing policy changed in 2006/07 to include more ELL students in the English Language Arts test.

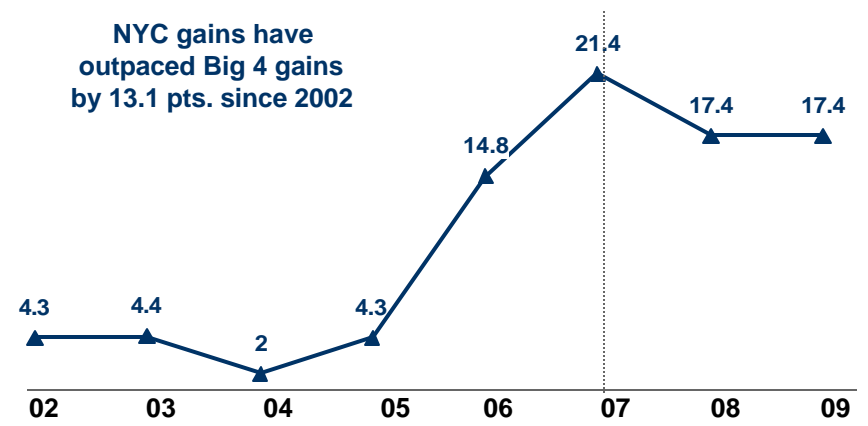
“ROOM TO GROW” CANNOT EXPLAIN ALL OF NYC’S GAINS: NYC OUTPACED OTHER BIG NY CITIES THAT HAD MORE ROOM TO GROW

Gap Between NYC & Big 4 in Percent of Students Meeting or Exceeding State Standards

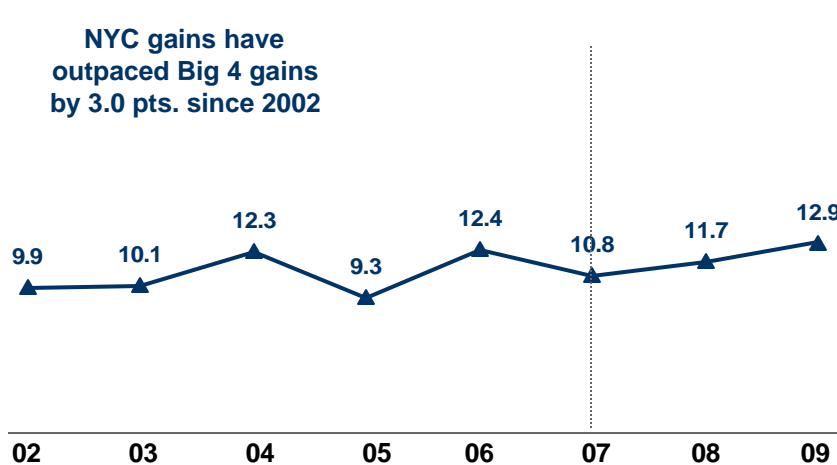
4th Grade English



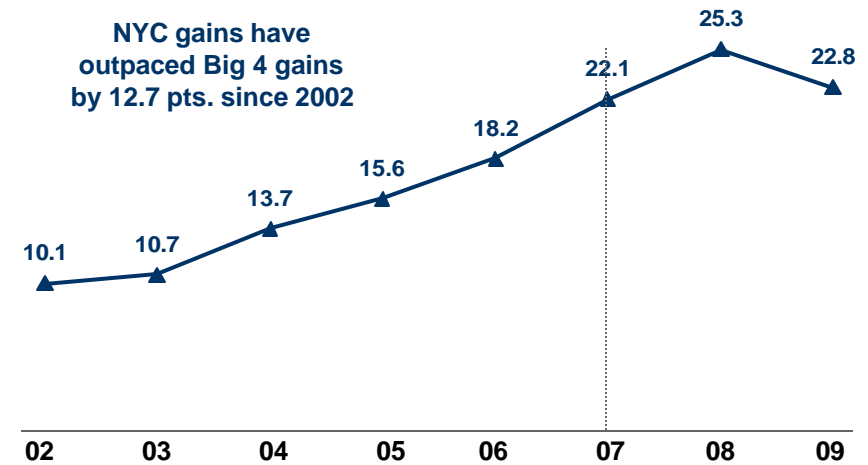
4th Grade Mathematics



8th Grade English



8th Grade Mathematics

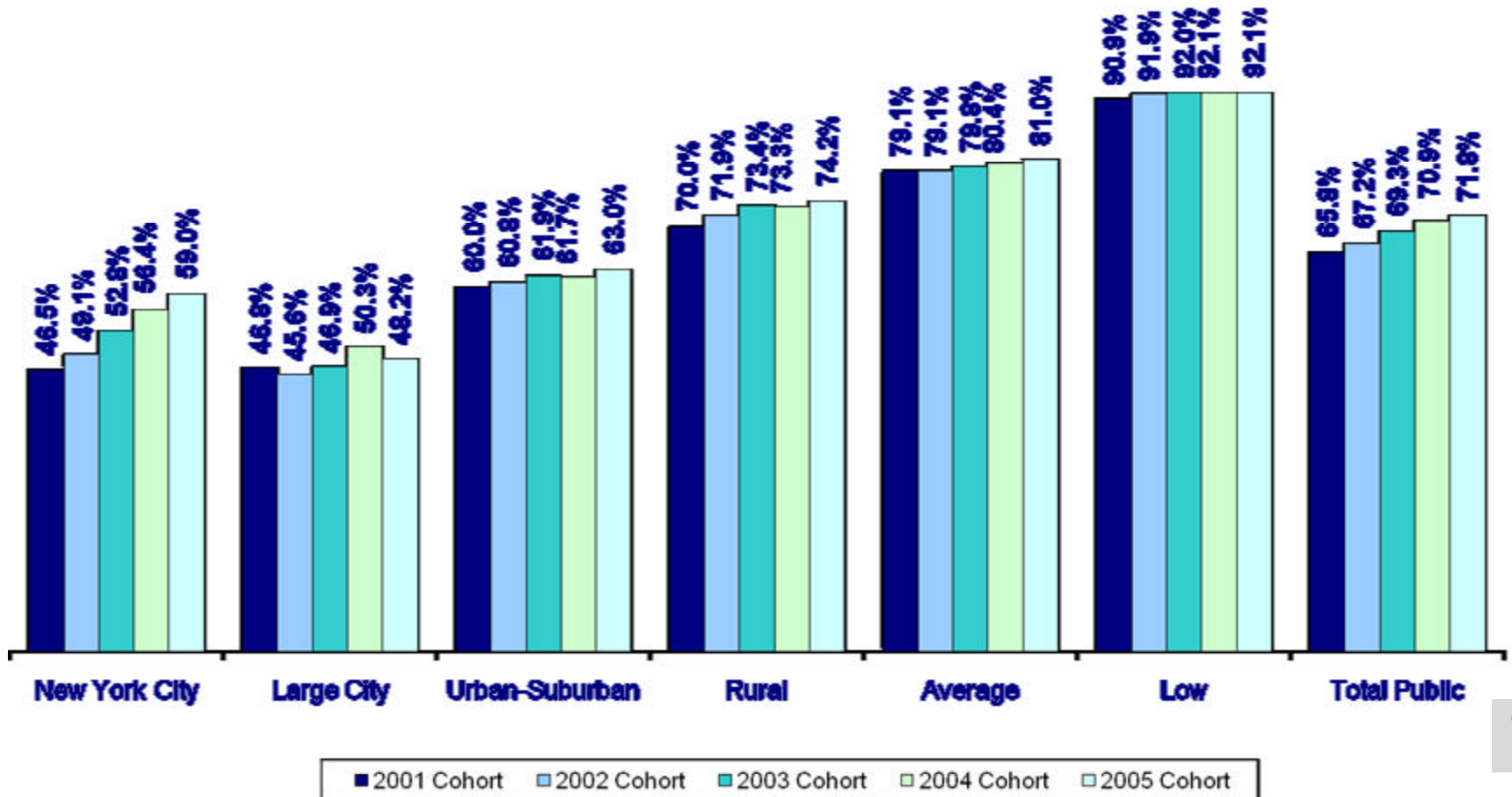


Note: Big 4 = Buffalo, Rochester, Syracuse, and Yonkers.

Change in Graduation Rates (State Graduation Rate) in New York City Compared to Change Elsewhere in New York State, 2005-2009

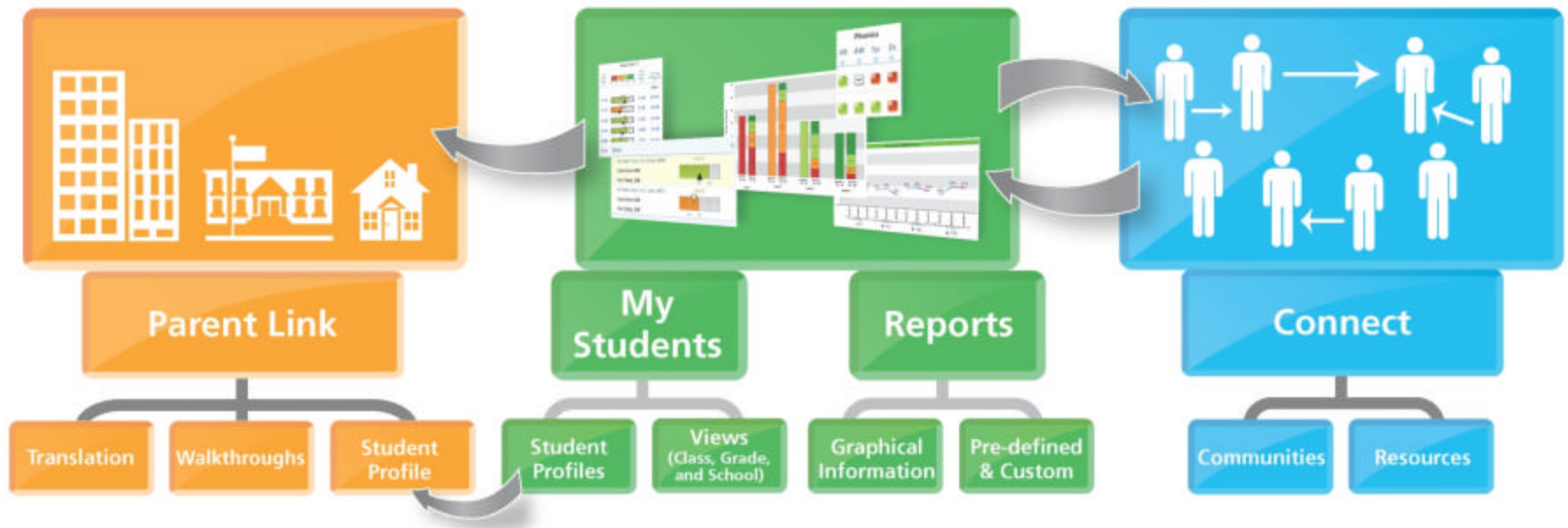
Percentage of Students Graduating with Regents or Local Diploma
After 4 Years

Results Through June 2009, All Students

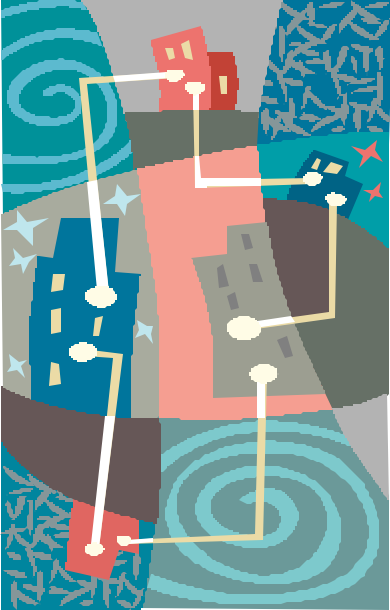


Changing the Way Educators Work: 'ARIS'

Achievement Reporting and Innovation System



ARIS Data Warehouse and Content Repository



- + ARIS provides one place where all critical data and knowledge resources can be easily viewed and used by all NYC DOE educators
- + ARIS uses nightly feeds from all NYC DOE academic data systems to generate up-to-date reports that identify student needs and facilitate daily planning
- + By organizing data and sharing quality content, ARIS saves teacher time in compiling information from multiple sources, preparing their classes and meeting the challenges that particular students present



- + By making it easy for educators to contribute content, work together to design solutions, and comment on the quality of available instructional resources, ARIS expands teachers' knowledge base and role in the leadership of our schools

Protecting Student Data

The ability to log in to ARIS does not automatically provide access to private student-level data. Federal law limits who may view that information.

Teachers automatically have access to information on the students enrolled in their classes.

Principals automatically have access to information on students enrolled in their school.

If you are a [school staff member](#), your principal can grant you access to student-level information if there is a legitimate educational need for you to see that data.

If you are a [central staff member](#), your central office may grant you access to certain students' information if you have a legitimate educational need to see the information. Please ask your office's ARIS Liaison for help in determining whether access can be provided.



My Students: 3-8 English Language Arts View

Attendance **NY State ELA Test**

Name	Gr.	Absences		NY State Test			Acuity Predictives		Acuity ITAs (2010-09)			Performance Series	
		Prior Year	YTD	OT Prof Pct	100 Prof Pct	10-100 Progress	Jun 08 % Correct (Form)	Nov 08 % Correct (Form)	% Correct (Version)	Reading PI	Lang Arts PI		
Ailston, Sandy	5	3	1	2.79	3.05	+0.26	63% (M)	2	40% (M)	57% (G)			
Austin, Joey	5	14	15	3.21	3.11	-0.20	77% (M)	3	52% (M)	48% (G)			
Burns, Deanna	5	21	9	3.31	2.63	-0.68	57% (M)	2	44% (M)	36% (G)			
Bulter, Ora	5	1	0	1.95	1.98	0.00	23% (M)	2	24% (M)	25% (G)			
Floyd, Geneva	5	11	10	2.08	1.98	-0.10	37% (M)	2	38% (M)	25% (G)			
Goodwin, Hollie	5	13	10	2.91	2.89	-0.02	33% (M)	2	44% (M)	38% (G)			
Hodge, Rogelia	5	4	2	2.18	1.93	-0.25	53% (M)			38% (G)			
Hoffman, Jeremiah	5	-	1			N/A		2	48% (M)	52% (G)			
Hogan, Samuel	5	4	4	1.99	2.34	+0.35	53% (M)	3	48% (M)	52% (G)			
Hudson, Hollie	5	18	11	3.03	2.89	-0.14	53% (M)	3	58% (M)	48% (G)			
Hughes, Faith	5	9	2	3.03	2.89	-0.14	30% (M)	2	40% (M)	38% (G)			
Jacobs, Levi	5	10	8	2.65	2.24	-0.41	63% (M)	3	52% (M)	43% (G)			
Jennings, Joyce	5		1			N/A		3	88% (M)	52% (G)			
Leve, Marina	5	6	1	2.06	2.43	+0.47	47% (M)	2	38% (M)	29% (G)			
Logan, Patrick	5	22	22	2.79	2.03	-0.76							
Lewis, Marlan	5	20	11	2.85	2.89	+0.24	47% (M)	3	58% (M)	71% (G)			
Mann, Marina	5	12	6	2.93	2.82	+0.29	57% (M)	2	40% (M)	67% (G)			
Marshall, Ernesto	5	18	7		2.34	N/A	57% (M)	2	44% (M)	48% (G)			
Nichols, Jimmy	5	12	5	3.03	2.53	-0.50	57% (M)	2	40% (M)	30% (G)			

Views

Filters

Acuity

Performance Series

My Students: 3-8 Multi Subject View


Absences NY State Tests

3-8 Multi Subject
 School: **Draco Termi School (4)** | Class: **Class 391** | Teacher: **Brittany Herrera** | Filter: **All Students**

Name	Gr.	Absences		NY State Test Results			
		Prior Year	YTD	ELA Jan '18	Math Mar '18	Science Taken in Grades 4 and 5	Social Studies Taken in Grades 5 and 6
<input type="checkbox"/> Alkon, Sandy	5	3	1	4th 663	4th 660	4th 73	
<input type="checkbox"/> Austin, Joey	5	14	15	4th 657	4th 660	4th 91	
<input type="checkbox"/> Burns, Deanna	5	21	9	4th 638	4th 656	4th 82	
<input type="checkbox"/> Butler, Ora	5	1	0	4th 605	4th 640	4th 58	
<input type="checkbox"/> Floyd, Geneva	5	11	10	4th 603	4th 631	4th 59	
<input type="checkbox"/> Goodwin, Halie	5	13	10	4th 648	4th 647	4th 75	
<input type="checkbox"/> Hodge, Rogelio	5	4	2	4th 600	4th 652	4th 67	
<input type="checkbox"/> Hoffman, Jeremiah	5	-	1				
<input type="checkbox"/> Hogen, Samuel	6	4	4	4th 626	4th 668	4th 68	
<input type="checkbox"/> Hudson, Halle	5	19	11	4th 640	4th 629	4th 73	
<input type="checkbox"/> Hughes, Faith	5	8	2	4th 646	4th 664	4th 85	
<input type="checkbox"/> Jacobs, Levi	5	10	8	4th 621	4th 633	4th 72	
<input type="checkbox"/> Jennings, Joyce	5		1				
<input type="checkbox"/> Leno, Martha	6	6	1	4th 632	4th 666	4th 72	
<input type="checkbox"/> Logan, Patrick	5	22	22	4th 613	4th 627		
<input type="checkbox"/> Lowe, Marian	5	20	11	4th 648	4th 647	4th 76	
<input type="checkbox"/> Mann, Maria	5	12	6	4th 643	4th 676	4th 68	
<input type="checkbox"/> Marshall, Ernesto	5	18	7	4th 625	4th 629	4th 79	
<input type="checkbox"/> Nichols, Jimmy	6	12	6	4th 632	4th 683	4th 87	
<input type="checkbox"/> Pena, Marc	5		2	4th 600			
<input type="checkbox"/> Perry, Alma	5	8	5	4th 643	4th 647	4th 62	
<input type="checkbox"/> Peters, Leon	5	19	8	4th 621	4th 637	4th 69	

View

My Students: High School Graduation Requirements View


Pauline Kramer | February 4, 2009 | [Report a Problem](#) | [Logout](#) | [Help ?](#)

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[Advanced Search](#) | [Taxonomy Browser](#) | [Open New Window](#)

School

- [Staff](#)
- [Grade](#)
- [Subject](#)

HS Graduation Requirements

School: **Karl Grell School (2)** Class: **Class 305** Teacher: **Gwen Lyons** Filter: **All Students**

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Name	Gr.	Cohort Year	Absences		Total Credits (44)	English			Social Studies			Math			Science			For.Lg.			Art & Music (2)	PE & Hlth (5)	Other
			Prior Year	YTD		Cr. (8)	Reg. / RCTs	Cr. (8)	Gl. H&G	U.S. H&G	Cr. (6)	Math A or RCT	Math B	Cr. (6)	Liv. Env. or RCT	Phys. Set.	Cr. (2)	Reg.					
<input type="checkbox"/> Butler, Jimmie (ELL)	9	2008	61	10																			
<input type="checkbox"/> Gates, Pablo (ELL) (C)	9	2006	94	2	4	0		0			0		2							2	0	0	
<input type="checkbox"/> Gordon, Randy (C)	9	2004	127	38	6.2	1	-	0			1	-	1	-						2	1+	0	
<input type="checkbox"/> Klein, Emma	9	2008	47	13																			
<input type="checkbox"/> Munoz, Cecil	9	2008	38	2																			
<input type="checkbox"/> Owens, Bill (ELL) (C)	9	2007	32	2	5.6	1		1			2	×	1	×						0	0+	0	
<input type="checkbox"/> Pena, Wilbert	9	2008	10	1																			
<input type="checkbox"/> Schmidt, Virginia	9	2008	22	3																			
<input type="checkbox"/> Sutton, Marvin (C)	9	2007	5	2	5	1		0			2	×	1	-						1	0	0	
<input type="checkbox"/> Walters, Kelly (ELL)	9	2008	25	7																			
<input type="checkbox"/> Andrews, Jeff	10	2007	7	2	12.2	2		2			4	×	1	×						2	1+	0	
<input type="checkbox"/> Lowe, Leigh (ELL)	10	2007	52	3	8.6	2		2			2	×	1	×						1	0+	0	
<input type="checkbox"/> Gordon, Rafael	11	2005	32	8	22.4	7	✓✓	4	×		5	✓	3	57		0				1	2+	0	
<input type="checkbox"/> Santos, Wendy (ELL)	11	2006	17	6	24.4	4		4	×		5	×	5	✓						4	2+	0	

Aggregate Data

The Aggregate School View displays key performance metrics and some administrative information for educators who work with multiple schools.

Principals see similar data for their own school. Teachers can see their own classes.

The screenshot displays the ARIS system interface for 'My Schools: Grades 9-12'. The interface includes a navigation menu with 'Home', 'My Students', 'Connect', and 'Reports'. A search bar is located at the top right. The main content area shows a table of aggregate data for various schools. The table is organized into sections: 'Students', 'Grade 8 NYS Tests', and 'Regents Examinations'. Annotations with orange boxes and arrows point to specific parts of the interface: 'Views' points to the 'Views' section in the left sidebar; 'Student Data' points to the 'Students' section of the table; 'Grade 8 NYS Tests' points to the 'Grade 8 NYS Tests' section of the table; 'Regents Results' points to the 'Regents Examinations' section of the table; and 'School' points to the 'School' column header.

School	Students										Grade 8 NYS Tests				Regents Examinations % with high Regents score of 65+								
	Tot.	9	10	11	12	U	% ELLs	% IEPs	Avg. Attend. Rate	% Repeating Grade	% Off Cohort	% in Level 3 or 4				Eng.	Math			Soc. Studies		Science	
											ELA	Math	Soc. Stud.	Sci.	Any	Int. Geo.	Adv. *	Glob. Hist.	U.S. Hist.	Any	Phys. Set.		
292	95	87	59	51	0	12	25	86	10	11	25	33	13	36	24	45	-	1	21	12	38	3	7
17	6	1	1	8	1	0	12	-	6	12	33	33	50	50	0	6	-	0	0	0	6	0	0
567	203	189	95	80	0	7	24	86	19	30	34	42	19	41	12	40	-	1	19	11	29	6	10
325	91	83	83	68	0	5	21	92	3	6	33	50	18	48	30	40	-	0	0	0	2	1	8
372	122	113	62	74	1	15	21	86	14	22	20	35	18	29	24	44	-	8	31	18	28	18	7
534	0	236	250	48	0	72	1	93	23	35	50	25	20	50	14	59	-	11	41	17	54	25	32
410	177	139	49	45	0	1	3	95	0	0	86	95	81	92	10	71	-	13	23	11	58	52	20
207	9	93	40	65	0	5	7	71	40	77	35	23	13	29	62	71	-	0	35	29	44	6	15
566	161	144	149	112	0	0	1	95	1	2	99	100	96	99	46	80	-	0	45	69	61	26	4
116	36	28	23	24	5	3	33	88	4	16	34	32	16	30	19	32	-	0	10	11	32	11	7
421	138	107	104	72	0	3	19	90	7	8	38	41	29	45	32	47	-	0	34	16	39	3	3
357	103	99	87	68	0	7	19	81	7	9	29	35	18	32	23	20	-	0	8	1	3	1	4
370	114	96	74	85	1	7	14	85	1	7	22	35	13	26	35	54	-	4	51	19	51	15	16
407	119	102	96	90	0	3	13	93	2	5	52	66	40	59	29	64	-	5	25	61	62	22	35

Customizable Reports



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Report Essentials

Math NYS Tests
 By Class
 School
 07-08
 B: End of Year

Population

Networks
 Empowerment Network 1
 Robert W. Wilson Middle School
 2 Grades
 Math
 3 Courses
 3 Teachers
 10 Classes

Measure

Overall
 Overall
 Levels
 4 Levels Charted

Time

(Annual) 07 - 08

Presentation

Paginate by School
 Format/Labels %
 Alphabetically

Advanced Filters

Ethnicity
 African American
 504 Status
 No
 No Filter

[View This Report](#)

1 of 2 Select a format Export

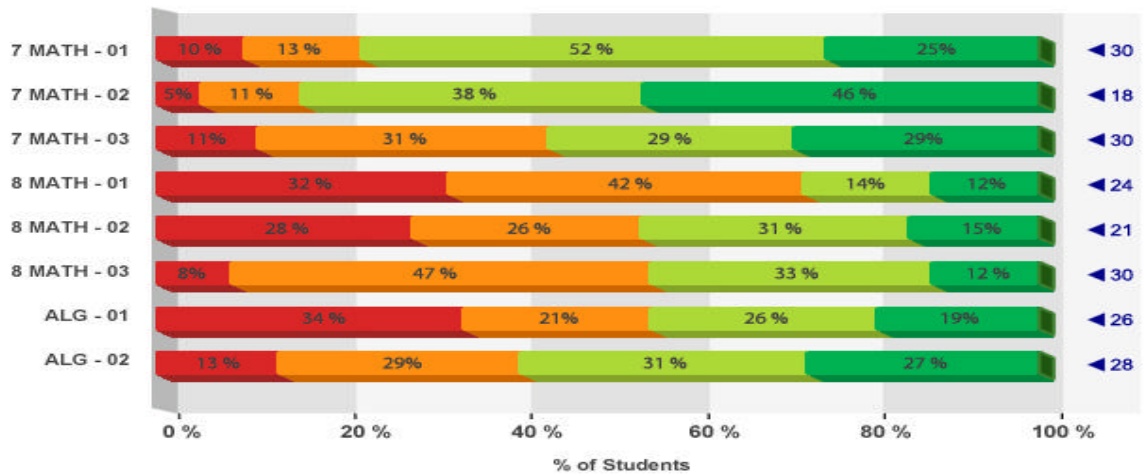
Pop Comparison Chart: Math NYS Tests by Class

Printer-friendly? Yes No

For Robert W. Wilson Middle School

Population	Time	Measure
Network: Empowerment Network 1 School: Robert W. Wilson Middle School Teacher: 3 Teachers Class: 10 Classes Grades: Gr. 7, Gr. 8 Subjects: Math Courses: 3 Courses	B: Enrollment at end of selected school year (Annual) 07 - 08 Current as of: 03/05/09	Math NYS Tests Overall Total Students Assessed Level 1 Level 2 Level 3 Level 4
Filter: Ethnicity Value: African American	Filter: 504 Status Value: No	

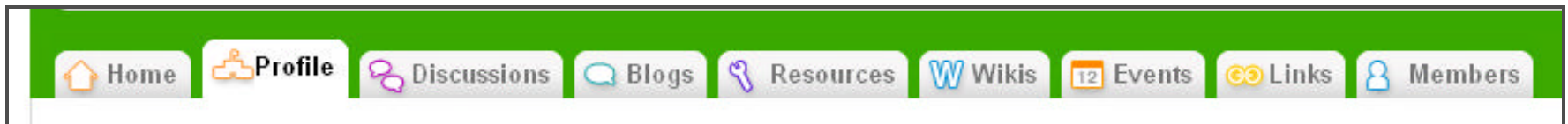
[For Network](#) [By Grade](#) [By Ethnicity](#)



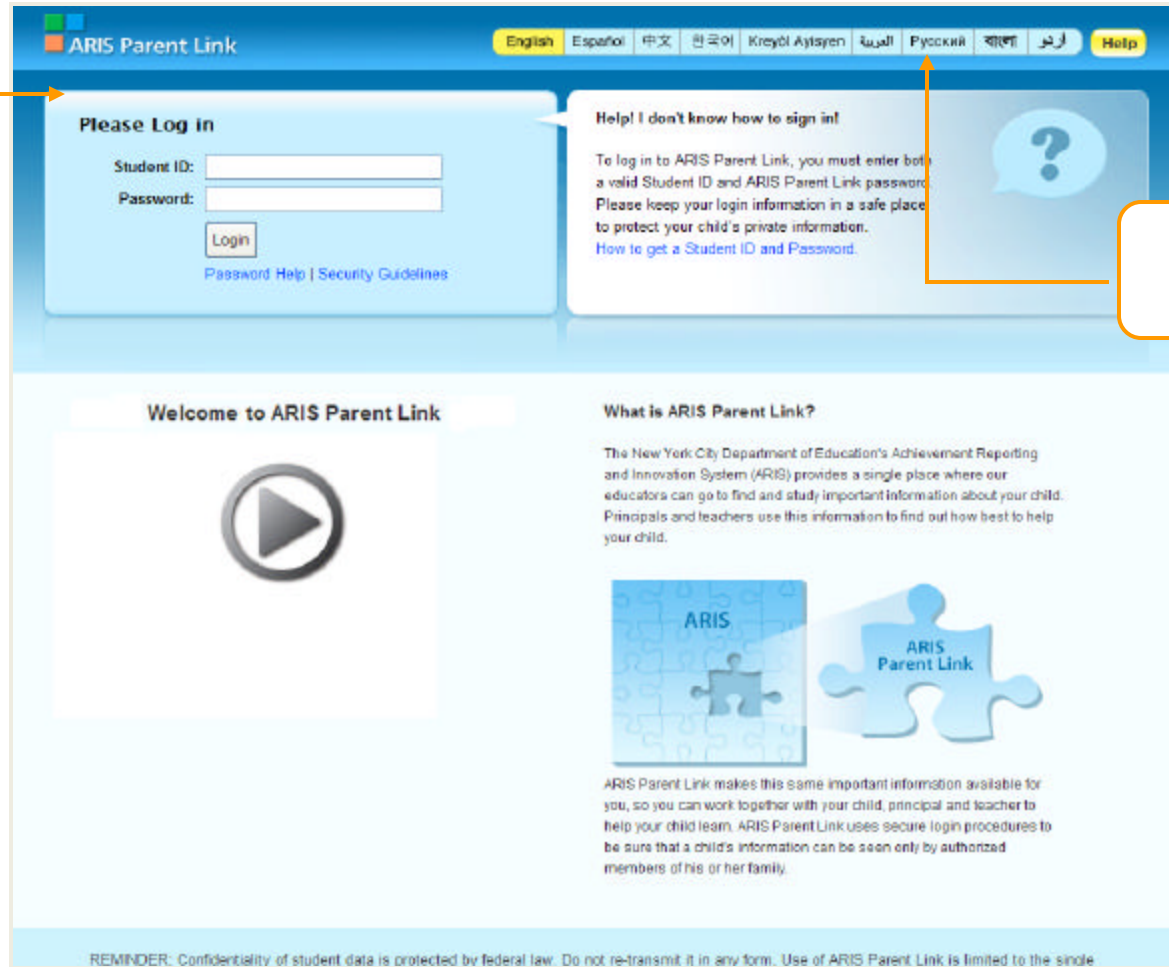
NOTE: Class can include homerooms (official classes), course sections, and groups created in ARIS. DOE Employees may access and use individual student data only for legitimate educational purposes, and are required to maintain strict confidentiality of such data. Populations with no data are not included.

ARIS Connect

- Key knowledge is developed locally in individual schools in response to problems presented by individual students and groups of students.
- Connect enables collaboration through web 2.0 tools (wikis, blogs, discussion forums, communities) so that educators can share and refine best practices – describe what worked (or did not) when they tried to solve a similar problem. Provides:
 - The framework for ongoing sharing of outcomes and learning across teams, across schools, and across the city.
 - A forum for discussion of instructional practices, through public and private communities
 - A library of instructional resources, many tagged to specific state standards.



ARIS Parent Link: Log In



Parents can log on at: www.arisparentlink.org

ARIS Parent Link: Welcome

ARIS Parent Link Home Student Profile My Account Log Out Help

Ortiz, Manuel Jose Student Info:
ID: 15936 Grade: K School: 3-8 Assessment And Credit School
Date of Birth: 9/1/99 Class: BM9 (Generic, Calia)

Home English Language Arts **Mathematics** Science Social Studies

What is Manuel learning?
The New York State standards describe what your child is expected to learn this year. You can view the New York State ELA standards [here](#).
▶ Summary of important skills that grade children are expected to learn in English Language Arts this year.

How is Manuel doing?
In APL, you can see the same information that your child's teacher sees in the [ARIS student profile](#). For recent scores, you can also view a walkthrough to learn how your child is doing in English Language Arts this year. In APL, you can see the same information that your child's teacher sees in the [ARIS student profile](#).
▶ Acuity Instructionally Targeted Assessment: English Language Arts
▶ Acuity ITA: English Language Arts
▶ Acuity Predictive Assessment: English Language Arts
▶ Grade 3-8 New York State Test: English Language Arts

How can I help my child learn?
Families are important partners in the education of their children. Ask your child's teacher what you can do at home to help your child develop in English Language Arts. Each walkthrough in APL ends with a list of steps you can take at home to help your child develop skills in English Language Arts.

What is my child learning?

How is my child doing?

How can I help my child learn?

Customized Parent Walkthroughs

What is this assessment?



How does this assessment help you teach my child?



How did my child do on this assessment?



How can I help my child succeed?



Building Data Systems: Lessons Learned

- **Quality of Vendor**
 - Shared vision with business owner
 - Quality product management (commitment to user perspective)
 - Quality project management (expertise to manage across groups, perspectives)
 - Trust but verify
- **Internal Partners**
 - Shared vision, commitment to problem-solving not just “question answering”
 - Attention to differences in business and technology perspectives
 - Clear, detailed understanding of expectations, dependencies
- **User Perspective**
 - Best revealed through actual use; need flexibility to change
 - Key an eye on tools users adopt “in the meantime”
 - Each tool creates demand for new ones; need flexibility to meet new demand
- **Data Sources: each one will be a bigger battle than you expect**
- **Deployment**
 - Don’t underestimate the task - it’s not the end; it’s the beginning
 - Design deployment to learn quickly from problems and complaints
- **Professional Development : embed ‘data inquiry’ in the daily work of schools**