

# Bracing for the Storm

## June 2016 Discussion Paper Update

on

## New York's Transition to the Common Core Algebra 1 and ELA Regents Exams

By David Rubel

[www.davidrubelconsultant.com](http://www.davidrubelconsultant.com)

---

- ❖ *Analysis shows explosion in numbers of incoming 9th graders not on track for graduation;*
- ❖ *Class of 2018 graduation rates could plummet;*
- ❖ *New project-based graduation pathway is promising, but significant barriers to implementation remain*
- ❖ *Will June 2016 NYSED Regents Algebra 1 test scoring adjustment return the passing rate to pre Common Core levels?*

**Summary:** In January, the New York State Education Department reported that the Class of 2015's four-year graduation rate had reached 78.1 percent. The increase continued an incremental trend that's ticked up steadily over the past two decades. But that trend could come to a screeching halt in just two years as New York's examination-based graduation requirements intersect with the state's transition to the Common Core learning standards.

Beginning with the Class of 2018, the statewide graduation rate could drop significantly. Students in this cohort were the first required to take—and pass—a Common Core-aligned New York State Regents examination. A preliminary analysis of their performance on the exam, the Algebra 1 Regents, shows that pass rates dropped significantly—especially so for low-income students, English language learners, and those with disabilities.

In subsequent years, there are signs to suggest that graduation rates will continue to decline if significant action is not taken. Since 2013, the share of 8th grade students scoring a Level 1, deemed “well below proficient for their grade” in math, has more than quadrupled. Tens of thousands of additional students are now entering high school not on track to graduate.

The New York State Education Department January 9<sup>th</sup> *Pathways to Graduation Memo* is a major policy shift. The needs of students with disabilities and English Language Learners are being recognized and offered the possibility of a workable solution. A newly proposed pathway for graduation, a project-based assessment program, could offer relief and hope to these thousands of high school students now at risk of not graduating with a Regents Diploma. But the 2018 graduation clock is ticking and there are many unanswered questions about how the program will be adequately funded and implemented alongside the simultaneous rollout of the Common Core standards.

A NYSED June 2016 Memo [“Regents Exam Workgroup Recommendations for June 2016 Regents Examination in Algebra I \(Common Core\) Scale Maintenance”](#) indicates that the Common Core Algebra 1 Regents exam will be adjusted to have a higher passing rate for the upcoming June 16, 2016 administration (and August 2016 and January, 2017).

“As a result of the maintenance, scores of 55, 65, and 85 will remain the cut scores for Level 2, Level 3, and Level 5, respectively. Because the cut score for Level 4 was not mathematically fixed, the score range associated with this level will change. However, it will not reflect any increased difficulty in achieving this performance level. Conversely, the Department expects additional students to pass the Regents Examination in Algebra I (Common Core) and achieve the higher performance levels. As in the past, the scale scores and corresponding performance levels will be reported on the conversion chart that is released with the scoring materials.” Source: NYSED June 2016 Memo

While this is welcome news for all parties, and especially for the 50,000 to 60,000 ninth grade students not on track to graduate, there are two major questions:

- ❖ How much will the Common Core Algebra 1 Exam be tweaked?
- ❖ Will the passing rate return to pre-Common Core levels?

This Common Core Regents Discussion Paper update identifies a roadmap of challenges and opportunities. Unless serious consideration is given to the issues discussed below, the number of students not graduating will increase by the thousands. Even now, these students are living with heightened anxiety over the likelihood of graduating with a Regents Diploma.

**Background:** In 2015, I authored two Discussion Papers on the transition to the Common Core Regents Exams in New York State. The [first Discussion Paper](#) documented a significant drop in the passing rate for the Common Core Algebra 1 and ELA Regents exams for students with disabilities and English language learners. It also showed how a significant flaw in the test development methodology may be the reason for the drop in scores for students with disabilities and English language learners. The [second Discussion Paper](#) showed how an early warning and detection system can help schools better target resources to struggling students. Both Discussion Papers focused on two at risk groups, students with disabilities and English Language Learners. Articles in [ChalkbeatNY](#) and [US News and World Report](#), and the [New York Times](#) covered the Common Core Regents test score issue. The January 9<sup>th</sup> Pathways to Graduation Memo is a major policy shift for NYSED. The needs of students with disabilities and English Language Learners are being recognized and offered the possibility of a workable solution. The June 2016 NYSED memo might even bring the passing rate to pre-Common Core levels.

## FINDINGS and OBSERVATIONS

1. **An analysis of the past four years of the NYS 8<sup>th</sup> grade Math scores, comparing pre Common Core to Common Core test scores, shows that the number of students now entering high school unprepared for high school math has increased from 7% to 36%.** The New York State Grade 3 to 8 ELA and Math test have four performance levels. Level 1 is the lowest and Level 4 is the highest. Below are the two NYSED official performance level definitions for the New York State Math test for years 2012 (pre Common Core) and 2014 (second year of the Common Core). The Level 1 performance definitions for the pre and Common Core are basically the same. An 8<sup>th</sup> grade student with a Level 1 score is not at all prepared for 9<sup>th</sup> grade math (typically Algebra).

**Definitions of Performance Levels for the 2012 Grades 3-8 Mathematics Tests Level 1:**

Student performance does not demonstrate an understanding of the mathematics content expected at this grade level. <http://www.p12.nysed.gov/irs/ela-math/2012/2012-MathDefinitionsofPerformanceLevels.pdf>

**Definitions of Performance Levels for the Common Core 2014 Grades 3-8 Mathematics Tests**

**NYS Level 1:** Students performing at this level are well below proficient in standards for their grade. They demonstrate limited knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered insufficient for the expectations at this grade. Source: <http://www.p12.nysed.gov/irs/ela-math/2014/2014-MathDefinitionsofPerformanceLevels.pdf>

**Chart 1. Students Scoring Level 1 on the NYS 8<sup>th</sup> Grade Math Test**

8 <sup>th</sup> Grade Math Scores	2011 (Pre-Common Core) Students/%		2012 (Pre-Common Core) Students/%		2013 Common Core Students/%		2014 Common Core Students/%		2015 Common Core Students/%	
	Level 1	18,291	9%	14,050	7%	61,446	31%	55,028	37%	44,483

Source: <http://www.p12.nysed.gov/irs/reportcard/>

**Chart 1. Analysis and explanation:** The chart offers a comparison of five years of statewide New York State 8<sup>th</sup> Grade math exam Level 1 results for all students taking the exam. The first two years show the pre-Common Core 8<sup>th</sup> Grade Math Exam results. The next three years show the Common Core Math results. While one may interpret the number of students scoring Level 1 dropping each year as evidence of progress, the actual reason is due mostly to the opting out factor (the total number of students in Level 2 and Level 3 also saw big drops between 2014 and 2015). With opposition to the Common Core percolating around the state, the numbers of 8<sup>th</sup> grade students opting out by not taking the Math (and ELA) exam grew significantly in 2014 and 2015. Therefore, the actual number of 8<sup>th</sup> grade students with a Level 1 score, if all 8<sup>th</sup> graders had taken the math test in 2015, would be higher than 44,483. Another issue that must be considered is that in years 2014 and 2015, 8<sup>th</sup> graders taking advanced math only had to take the Algebra 1

Regents exam and no longer had to take the NYS 8<sup>th</sup> Grade Math test. Between 8<sup>th</sup> graders opting out or taking the Regents exam only, the drop in the number of students taking the 8<sup>th</sup> Grade Math Test went from **200,721 in 2012 to 198,213 in 2013 to 146,951 in 2014 to 112,055 in 2015**. For the number and percentage figure of all 8<sup>th</sup> graders with a Level 1 score, a suggested method is to take an average of all three years of Common Core: **an increase of 36% or 53,652 students**. However, when 7<sup>th</sup> grade Math test scores are considered, the number of students with Level 1 scores is even higher than in 8<sup>th</sup> grade (see appendix 2 for a comparison of 7<sup>th</sup> Grade NYS Math and ELA test score results).

**A similar situation can be found with the NYS ELA exam:** In Chart 2. below are statewide test scores for the pre Common Core and Common Core Grades 3 to 8 English Language Arts (ELA) Exam. Using year 2013 Common Core ELA, almost 60,000 8<sup>th</sup> grade students had Level 1 test scores. This means that high schools are managing with a very big increase in the number of students not prepared for High School English. There are **four times as many students than in 2012** (2012 was the last year before the launch of the Common Core Grade 3 to 8 ELA test). Also, the actual number of students with a Level 1 score is most likely higher than the 44,253 figure. Due to the opt out movement, there was a large drop in total test takers; 40,000 fewer 8<sup>th</sup> grade students took the ELA test in 2015.

**Chart 2. Students Scoring Level 1 on the NYS 8<sup>th</sup> Grade ELA Test**

8 <sup>th</sup> Grade ELA Scores	2011 (Pre-Common Core) Students/%		2012 (Pre-Common Core) Students/%		2013 Common Core Students/%		2014 Common Core Students/%		2015 Common Core Students/%	
	Students	%	Students	%	Students	%	Students	%	Students	%
Level 1	16,109	8%	13,943	7%	58,381	30%	53,289	28%	44,353	30%

Source: <http://www.p12.nysed.gov/irs/reportcard/>

***Around 60,000 students are now starting high school in NYS each year (45,000 more than before the Common Core) with little likelihood of passing the Algebra Common Core 1 Regents Exam (or the Common Core ELA exam) unless well proven interventions are planned for them. Another option for these students will be the Project Based Assessment path to graduation- assuming it is fully in place for the class of 2018. A similar challenge exists with the new Common Core ELA Regents Exam.***

2. **There are now two passing rate numbers that deserve scrutiny because they are big red flags for the graduation rate.** The first number is the increase in the number of students that failed the new Common Core Algebra 1 Regents Exam in June 2015 over the old Integrated Algebra Regents Exam. It's around 23,000 high school students statewide<sup>1</sup>. The second figure, one that has not received any public discussion, are the *Regents Test Re-takers*. There are around 75,000 students in this group. *Regents Test Re-takers* is comprised of students that historically failed the old Integrated Algebra Exam. The NYSED annual figure for this group includes students that took the test between 1 and 3 times (the Regents is offered three times a year). The highest of the three scores is recorded.

How did this other much larger group, *Regents Test Re-takers*, fare on the new Common Core Algebra 1 exam? This is the most crucial question for gauging the actual number of high school students not on track for graduation. Here are the reasons for concern: The new Common Core Algebra 1 Exam is a much more difficult exam. For the students that failed the test last June, did a student score within reach of passing the next time around or was their score so low now that they will need a lot of extra help from their high school? The incoming 9<sup>th</sup> grade student data discussed above is a big red flag for Regents test re-takers group.



If the number of incoming 9<sup>th</sup> graders with Level I scores has nearly quadrupled in size from pre-Common Core, it is highly likely that these students, now hidden in the Regents Test re-takers group, will need more help.

	2012 Integrated Algebra Regents	2013 Integrated Algebra Regents	2014 Integrated Algebra Regents	2015 Common Core Algebra1 Regents
<b>Total Algebra Regents Test Takers</b>	283,530	289,887	266,172	206,276
<b>Regents Test Re-takers /Not Passing Score</b>	82,223	75,370	74,528	73,384

Source: NYSED Report Card

***How far are students now from the goal line of getting a passing score of 65?*** NYSED has access to all internal Regents test score data and must see that a big storm is on the way. The public should not have to wait for another seven months, until November 2016, to see the first full year of Common Core Algebra 1 Regents test scores (August 2015, January 2016 and June 2016). **If it's a statewide problem, then it will require a statewide solution. However, right now the public is blind without access to the data.**

<sup>1</sup> The June 2015 Common Core Algebra 1 Regents administration had a total of 206,276 test takers. However, a typical June Administration has around 270,000 test takers. So based on typical June Administration figures, 64,000 students did not take the Common Core Algebra 1 Regents exam last June. A closer look at which students did not take the Common Core Algebra exam reveals that at least 1/3 were from either English language learners or students with disabilities. So it is highly likely that the real failure rate figure for the Common Core Algebra 1 Exam, if a typical year of student test takers is used, is higher.

**3. NYSED Pathways to Graduation offers three options for at risk students:** the new Pathway to Graduation has three new options for students that cannot pass the five Regents Exams requirement for graduation.

1. “Expanding the existing eligible score band for an appeal on a Regents exam by two additional points. Under this proposal, students could appeal scores of 60-64 (expanded from 62-64) on up to two Regents examinations.
2. “Awarding a Career Development and Occupational Studies (CDOS) Commence-ment Credential in lieu of one of the Regents examinations. A student must still pass four of the required Regents examinations – one in each of the defined discipline areas required for other pathway options (English, Math, Science and Social Studies).
3. “Creating a project-based assessment program for students who pass the coursework required for a regular diploma but who are unable to pass an associated required Regents examination”

### Expanding Pathways to Graduation with Project-Based Assessments

A set of activities a student completes independently of classroom instruction in order to demonstrate proficiency in a content area and meet State graduation requirements.

**Real-life projects** developed by teachers designed to measure the State's standards in the respective content areas.

---

Students are provided **supplemental, tutorial instruction.**

---

Assessment may be administered in a **computerized and supervised** testing situation.

---

**Scored by trained evaluators** based on a scoring rubric established by the State.

Implementation of project-based assessments will require substantial additional resources to the Department.



The first two options will only make a very small dent in the graduation rate. NYSED admits that at best only 4% of the failed students group could benefit from Option 1. Option 2 will now allow a student to complete the Career Development and Occupational Studies (CDOS) credential instead of having to pass a fifth Regents exam. Option 2 will not provide relief to struggling high school students since a student will still have to pass the Common Core Algebra and ELA Regents exams. These exams are the two new hurdles that are could result in a drastic drop in the graduation rate.

Only the third option, **Project Based Assessment** has the potential to have a significant impact on the graduation rate. Students will be allowed to pursue a Project Based Assessment (PBA) if they failed the Regents Exam at least twice. The PBA is another way for a student to demonstrate that they have mastered classroom content. PBA's usually include “real life projects that measure proficiency toward State standards”. The assessment will be as rigorous as the Regents Exam. PBA's are already in use in other states including Maryland, Pennsylvania, Rhode Island, and Washington. For example “in **Maryland**, the state is using an academic intervention called the Bridge Plan for Academic Validation that allows the use of a rigorous project-based assessment aligned to State assessments for students who have passed their other requirements but are not successful with traditional assessments.” Source: NYSED January 8, 2016 Memo

**4. The 2018 graduation clock is ticking. Will NYSED have the project based assessment system ready in time?** Beginning with school year 2014-15, around 50,000 to 60,000 students across NYS are starting high school and are not on track to pass the new Common Core Algebra 1 Regents exam. NYSED's new Project Based Assessment (PBA) policy shift may help this group to graduate even if they are not able to pass the Regents. The fate of many of these students is riding on Project Based Assessments.

Resources Needed for Project-Based Assessments	
State	District
<ul style="list-style-type: none"> <li>• Time for NYSED to support a task force comprised of New York stakeholders</li> <li>• Resources to provide the secure online portal and to provide technical assistance and help-desk support to school districts administering PBAs</li> <li>• Staff to develop the training and technical assistance resources to be posted on the Department's website</li> <li>• Individuals to score PBAs</li> </ul>	<ul style="list-style-type: none"> <li>• Tutorial staffing (teachers to provide supplemental instruction)</li> <li>• Test administrators</li> <li>• Scheduled time for students to work on their PBAs (e.g., some schools provide time during the summer, or after school)</li> <li>• Computer-based technology for assessment administration</li> </ul>

37

With the exception of [Chalkbeat](#) and [Advocates for Children](#), there wasn't much coverage or response. Since NYSED made its announcement there are five critical questions that need answers:

- How long will it take to develop a project based assessment statewide? Graduation is just two years away.
- When will high schools be allowed to use the new project based assessment?
- Will the Project Based Assessment system be in place for the class of 2018? The Maryland Bridge Plan requires a lot of work. Is there enough time for a pilot program? What about cost and training thousands of high school teachers?
- Once the Project Based Assessment system is operational, how much time will individual teachers have to give to students that want to pass a PBA for graduation? Will teachers have sufficient time above their regular classroom responsibilities?
- If the Project Based Assessment system is not in place, will NYSED allow these students to take the old Integrated Algebra Regents Exam or offer a new graduation policy?

Meaningful and practical answers to these questions will determine if NYSED can meet its spring 2018 graduation deadline.

5. **“Implementation of project-based assessments will require substantial additional resources to the Department.”** Source: January 8, 2016 NYSED Memo. Where in the recently passed 2016-2017 NYS Education Department Budget is the money needed to implement the new Project Based Assessments graduation option? Also, the FY 2017 New York State Education budget includes \$75 million for community schools. What about the high schools that have significant numbers of struggling students but are not part of the NYSED Receivership schools program? While

schools are being confronted with new graduation roadmap hurdles, the only new funds they could draw on is a district wide increase in Foundation Aid.

6. **What can schools do right now to help struggling students pass the Common Core Algebra 1 Regents?** An early warning and detection system, based on the 8<sup>th</sup> grade math scores, is already in place. Why not use it? If NYSED carefully studies the internal test score data, it will clearly know that a big storm is on the way. Do schools have enough resources to manage the uncertainty and anxiety of students completely unprepared for high school algebra? The number of at risk students has to be considered for all four high school grades not just 9<sup>th</sup> grade. There are plenty of 10<sup>th</sup> grade students that will continue to need help with passing the Regents. A high school must now devote its scarce resources to students post 9<sup>th</sup> grade. An [August 2015 Report](#) by the New School Center for New York City Affairs describes the phenomenon as the “algebra whirlpool”. The report describes best practices several New York City high schools are using to ensure all students can pass the Algebra Regents exam. The author could not find any school resources on the NYSED Engage website that directly address the needs of high school students failing the Common Core Algebra 1 Regents exam.



**About the author:** For the past four years, on behalf of my client organizations, I have been helping the yeshiva schools of New York City with the transition to the Common Core Standards. Private schools have absolutely no legal obligation to use the Common Core standards or administer the New York State ELA, Math or Regents exams. However, since at least 65% of all NYC yeshiva school students graduate from high school with a NYS Regents Diploma, the Common Core is now a reality for these schools (and all Catholic High, Islamic, Greek Orthodox and Lutheran High Schools too). In practical terms, this means that nonpublic high school students have to meet the same passing scores as their public school counterparts: a passing score is 65 or higher on the new Common Core Algebra 1 and Common Core ELA, science and social studies Regents exams. If a nonpublic student wants to attend a CUNY or SUNY four year college, it means they must get at least a 75 on the ELA and 70 on the Algebra 1 Common Core Regents exams. Across New York State, both public and private schools, now have to devote more resources to helping their students pass the Common Core Algebra 1 Regents exam. This is the third in a series of Discussion Papers about the New York City Department of Education High School System. Each Discussion Paper is posted on the “[Public Policy Forum](#)” webpage of my website. [www.davidrubelconsultant.com](http://www.davidrubelconsultant.com)

## Appendix:

## **Definitions of Performance Levels for the 2012 Grades 3-8 Mathematics Tests**

### **Level 1: Below Standard**

Student performance does not demonstrate an understanding of the mathematics content expected at this grade level.

### **Level 2: Meets Basic Standard**

Student performance demonstrates a partial understanding of the mathematics content expected at this grade level.

### **Level 3: Meets Proficiency Standard**

Student performance demonstrates an understanding of the mathematics content expected at this grade level.

### **Level 4: Exceeds Proficiency Standard**

Student performance demonstrates a thorough understanding of the mathematics content expected at this grade level.

## **Definitions of Performance Levels for the 2014 Grades 3-8 Mathematics Tests**

**NYS Level 1:** Students performing at this level are well below proficient in standards for their grade. They demonstrate limited knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered insufficient for the expectations at this grade.

**NYS Level 2:** Students performing at this level are partially proficient in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered partial but insufficient for the expectations at this grade. Students performing at Level 2 are considered on track to meet current New York high school graduation requirements but are not yet proficient on Common Core Learning Standards at this grade.

**NYS Level 3:** Students performing at this level are proficient in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered sufficient for the expectations at this grade.

**NYS Level 4:** Students performing at this level excel in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered more than sufficient for the expectations at this grade.

Source: <http://www.p12.nysed.gov/irs/ela-math/2014/2014-MathDefinitionsofPerformanceLevels.pdf>

## **Appendix II:**

Below are the New York State 7<sup>th</sup> Grade math and ELA scores.

7 <sup>th</sup> Grade ELA Scores	2011 (Pre-Common Core) Students/%		2012 (Pre-Common Core) Students/%		2013 Common Core Students/%		2014 Common Core Students/%		2015 Common Core Students/%	
	Level 1	18,027	9%	15,914	8%	63,936	32%	67,170	35%	58,438

Source: <https://data.nysed.gov/>

7 <sup>th</sup> Grade Math Scores	2011 (Pre-Common Core) Students/%		2012 (Pre-Common Core) Students/%		2013 Common Core Students/%		2014 Common Core Students/%		2015 Common Core Students/%	
	Level 1	16,175	8%	18,055	9%	76,389	38%	64,631	35%	49,563

Source: <https://data.nysed.gov/>