



Student Progress to Graduation in New York City High Schools

A METRIC DESIGNED BY NEW VISIONS FOR PUBLIC SCHOOLS

Part I: Core Components

Authors:
Susan Fairchild
Brad Gunton
Beverly Donohue
Carolyn Berry
Ruth Genn
Jessica Knevals





This report is the first in a four-part series documenting the design, analysis, revision, and implementation of a new metric for measuring student progress to graduation and college readiness in New York City high schools.

Recommended citation:

Fairchild, S., Gunton, B., Donohue, B., Berry, C., Genn, R., & Knevals, J. (2011). Student Progress to Graduation in New York City High Schools: Part I: Core Components. New York, NY: New Visions for Public Schools.

Abstract

Students who achieve critical academic benchmarks such as high attendance rates, continuous levels of credit accumulation, and high grades have a greater likelihood of success throughout high school and beyond. However, keeping students on track toward meeting graduation requirements and quickly identifying students who are at risk of falling off track present challenges for school leaders, teachers, parents, and students.

This paper describes the core components of New Visions for Public Schools' (New Visions) early warning system — clear benchmarks and multiple tools for multiple audiences — and the movement of these tools into the DataCation platform, a web-based student information system providing real-time data delivery to 77 New York City schools.

Table of Contents

- **Background and Significance**5
- **Clear Benchmarks**.....6
 - Table 1. On Track for College Readiness: Breakdown of Credits and Regents by Semester*7
- **Multiple Tools for Multiple Audiences**8
 - The School Snapshot8
 - Figure 1. College Readiness Metric*9
 - Figure 2. Credit Accumulation by Regents Passage*10
 - Ninth Grade and College Readiness Trackers11
 - Figure 3. Ninth Grade Tracker*.....11
 - College Readiness Tracker12
 - Figure 4. College Readiness Tracker*12
- **Real-Time Reporting, Drill-Down Functionality, and Grouping Functionality**..13
 - Real-Time Reporting.....13
 - Drill-Down Functionality14
 - Grouping Functionality14
 - Figure 5. Aggregate Marking Period Averages by Subject Area and List of Students Who Have Failed English at Marking Period 1.*15
- **Conclusion**16
- **References**17

Background and Significance

Research shows that students who achieve critical academic benchmarks such as high attendance rates, continuous levels of credit accumulation, and high grades have a greater chance for success throughout high school and beyond.¹ Allensworth and Easton (2005) found that students on track to graduate by the end of their freshman year are 3.5 times more likely to graduate in four years than students who are off track by the end of freshman year. Freshmen who are off track had at least a 75 percent chance of dropping out of school,² and the warning signs are present well before they enter high school.³

However, a number of interdependent factors make it challenging to quickly identify students who are at risk of failing. The requirements for staying on track to graduate from high school are often mysterious to students and parents and sometimes even to school personnel.⁴ For example, in New York City (NYC), graduation requirements have changed seven times over the last ten years,⁵ making it difficult for parents, students, and school staff to keep abreast of current requirements. At the same time, the requirements for acceptance into the City University of New York system (CUNY), a primary recipient of NYC high school graduates, are becoming more rigorous.⁶ Making sense of the frequently changing high school graduation and college entrance requirements is further complicated in schools that are understaffed and serve student populations with more demanding scheduling and programming needs (i.e., credit recovery, credit acceleration). Data on students are critical for identifying and intervening with at-risk students, but low-resourced schools often have limited access to integrated data systems and staff who know how to navigate those data systems.⁷

Failure to quickly identify students in need and provide rapid intervention often results in increased dropout rates.⁸ Educators/researchers have identified three key components of an effective early warning system as critical in order to identify students at risk: 1) clear benchmarks,⁹ 2) easy to interpret and actionable data reports that synthesize data for different audiences,¹⁰ and 3) real-time data reporting.¹¹ This paper describes how these three elements have been incorporated into the New Visions' College Readiness Metric, the New Visions' data reporting tools designed for multiple audiences, and the movement of these tools into the DataCation platform, a web-based student information system providing real-time delivery to 77 NYC public schools.

Researchers have identified three key components of an effective early warning system as critical in order to identify students at risk:

- 1) clear benchmarks ,**
- 2) easy to interpret and actionable data reports that synthesize data for different audiences, and**
- 3) real-time data reporting.**

¹ E.g., Allensworth & Easton, 2005; Neild, Balfanz, & Herzog, 2007; Pinkus, 2008

² Neild, Balfanz, & Herzog, 2007

³ Allensworth & Easton, 2005, 2007; Neild et al., 2007

⁴ Taveras, Douwes, Johnson, Caspe, & Lee, 2010; Weiss, Lopez, & Stark, 2011

⁵ NYC DOE, 2011

⁶ CUNY, 2011

⁷ Halverson et al., 2005; Lachat, 2001

⁸ Allensworth & Easton; 2007; Balfanz, Herzog, & Mac Iver, 2007; Jerald, 2006

⁹ Allensworth & Easton, 2005

¹⁰ Sallam, Richardson, Hagerty, & Hostmann, 2011; Taveras et al., 2010; Wayman & Stringfield, 2003; Wayman, 2005; Weiss, et al., 2011

¹¹ Sallam et al., 2011; Lachat, 2001; Halverson, Grigg, Prichett, & Thomas, 2005; Tucker, 2010; Wayman & Stringfield, 2003

New Visions raised its own bar to create a new goal of 80 percent of students graduating from high school and entering and succeeding in college.

New Visions for Public Schools was founded in 1989 and has as its core mission the improvement of quality education in NYC public schools. In 2007, the NYC Department of Education (DOE) empowered principals to choose their own support organization based on their particular needs. New Visions was selected to serve as a Partnership Support Organization (PSO) responsible for providing a host of instructional and operational services to 77 public schools, primarily high schools. As part of this role, New Visions is held accountable for the academic success of approximately 38,000 students. During the course of its work as a PSO, New Visions shifted its focus from on-time high school graduation to college readiness. New Vision's initial goals were that 80 percent of seniors in their PSO would receive a diploma and that each student would maintain an annual attendance rate of 92 percent or higher. However, after gathering post-secondary data from the 2008 cohort, New Visions realized that students needed more than just the minimum graduation requirements in order to enter and succeed in college or to compete for jobs that pay more than the minimum wage. Thus, New Visions raised its own bar to create a new goal of 80 percent of students not only graduating from high school, but also entering and succeeding in college.¹² To improve the quality of education in PSO schools and substantially increase graduation rates and college readiness, New Visions has focused on the effective use of data to quickly identify problems, drive decision making, and mobilize school-based teams.

Clear Benchmarks

Clear benchmarks represent one of the three key elements for identifying at-risk students. Such benchmarks inform New Visions' data work and provide the framework for understanding student performance and monitoring student progress. Under NYC DOE promotion requirements, students need eight credits in order to be promoted from ninth to tenth grade.¹³ Yet research conducted in NYC secondary schools found that students who gain eight credits their first year had only a 25 percent chance of graduating on time.¹⁴ In Chicago, Allensworth and Easton (2005) developed an algorithm for classifying student performance as either on track or off track based on attendance, credit accumulation, and a report card grade of D or better in core subject areas across various points along the student's high school trajectory. They note that their metric is a measure of minimal student performance expectations, and it is constructed with the single purpose of measuring progress to high school graduation. Since the emergence of the Consortium on Chicago School Research's (CCSR) on-track metric, several major school districts across the nation have implemented early warning systems using benchmarks that help track progress to graduation.¹⁵

Building upon the concept of the CCSR metric that defines students as either on or off track, as well as credit accumulation findings from The Parthenon

¹² Taveras, Douwes, Johnson, Caspe, & Lee, 2010

¹³ NYC DOE, 2011

¹⁴ The Parthenon Group, 2006

¹⁵ Boston Plan for Excellence, 2011; Pinkus, 2008; Tucker, 2010; Weiss et al., 2011

Study, New Visions developed a “College Readiness Metric” that categorizes students based on important graduation and post-secondary expectations. New Visions’ College Readiness Metric combines overall credit accumulation, core subject credit accumulation, Regents exam scores, and semester sequence — clearly indicating where a student needs to be on the graduation and college readiness trajectory over the course of eight semesters. The metric is a color-coded system that classifies students into one of four groups (On Track for College Readiness, On Track to Graduate, Almost on Track to Graduate, and Off Track) at the end of each semester.

The metric is based on evenly paced credit accumulation throughout high school, with students earning 11 credits each year. These standards are higher than those currently set by NYC DOE for promotion. Students must also earn a certain number of credits in the core subject areas each year: math, English, social studies, and science. For instance, by the end of freshman year, a student should have accumulated two English, two social studies, two math, and two science credits to be considered on track to graduate. The College Readiness Metric incorporates different school credit awarding cycles (i.e., annualized cycle, semester, trimester) to account for the various school structures that exist in the PSO.

In addition to accumulating credits, students must pass New York State (NYS) Regents exams¹⁶ to be considered On Track to Graduate (on track for a Regents diploma). Starting with the graduating class of 2012, all students must pass the English language arts (ELA), mathematics, global history and geography, US history and government, and science Regents exams with a score of 65 or better. Students On Track for College Readiness must score at least a 75 on their math and ELA Regents exams in order to bypass CUNY remediation courses, as well as 65 or better on three additional exams (see Table 1).

New Visions’ College Readiness Metric combines overall credit accumulation, core subject credit accumulation, Regents exam scores, and semester sequence — clearly indicating where a student needs to be on the graduation and college readiness trajectory over the course of eight semesters.

TABLE 1. ON TRACK FOR COLLEGE READINESS: BREAKDOWN OF CREDITS AND REGENTS BY SEMESTER

For a student to be considered On Track for College:																
By the end of semester...	A student must earn this many credits:	Including this many credits in:													and	Regents passed at 65 and above ⁴ :
		English	Math ¹	Social Studies				Science ¹			Foreign Language ¹	PE/Health	Art/Music			
				Total ²	Global	American	Economics	Participation In Gov't	Total ³	Physical Science	Life Science					
1	5	1	1	1	0	0	0	0	1	0	0	0	0.58	0	1*	
2	11	2	2	2	0	0	0	0	2	0	0	0	1.16	0	1*	
3	16	3	3	3	0	0	0	0	3	0	0	1	1.74	0	1*	
4	22	4	4	4	0	0	0	0	4	0	0	2	2.32	0	3*	
5	27	5	5	5	0	0	0	0	5	1	1	3	2.9	0	3*	
6	33	6	6	6	0	0	0	0	6	1	1	4	3.48	0	7**	
7	38	7	7	7	4	2	0	0	7	2	2	5	4.06	1	7**	
8	44	8	8	8	4	2	1	1	8	2	2	6	5	2	9**	

¹⁶ In NYS, the Regents exams are high school exit exams mandated by the New York State Education Department and administered under the authority of the Board of Regents of the University of the State of New York.

Multiple Tools for Multiple Audiences

The second key element in an early warning system for at-risk students concerns the need for multiple tools for multiple audiences. New Visions developed a set of tools designed for school staff, parents, and students. The School Snapshot, the Ninth Grade Tracker, and the College Readiness Tracker convey data related to students' progress to graduation in a visually accessible, user-friendly format and at different levels of aggregation.

The School Snapshot

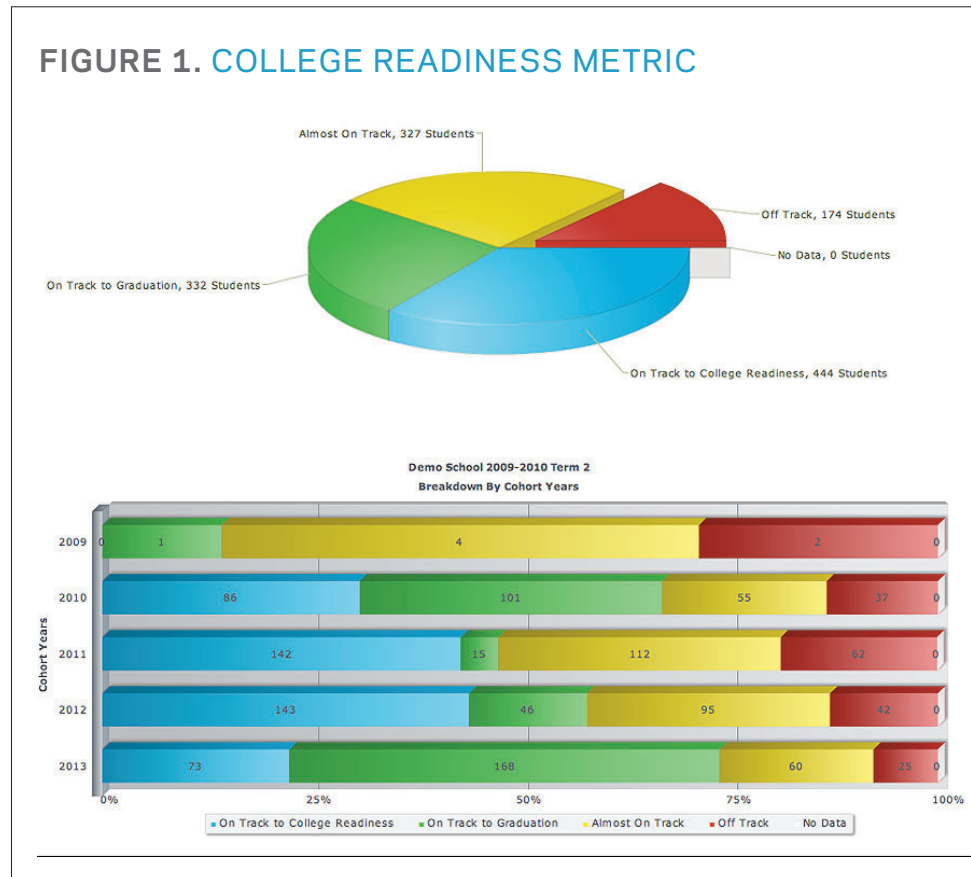
New Visions created the School Snapshot to meet the data demands of school staff. School staff need to know which students are well on their way to meeting college readiness and graduation requirements, which students are meeting graduation requirements but need help reaching college entrance requirements, which students are struggling to stay on track and need deeper intervention, and which students are off track and need multiple interventions in order to graduate. The School Snapshot integrates different data sources into an aggregate, school-level report summarizing student performance trends linked to city, state, and federal accountability indicators. It was designed to help principals and administrators quickly identify and target areas of need within their schools. New Visions piloted the School Snapshot for three years within the PSO network before being incorporated into the DataCation platform. Taveras et al. (2010) suggest that the straightforward organization of data into color-coded graphs, as in the School Snapshot, creates new opportunities within schools for discussion about at-risk students, while mitigating challenges associated with data management and data analysis.

The School Snapshot consists of several aggregated charts and graphs on student performance, including:

1. College Readiness Metric
2. Attendance
3. Marking Period Averages by Subject Areas
4. Credit Accumulation by Semester
5. Credit Accumulation by Subject Area
6. Total Credit Accumulation by Total Number of Regents Passed
7. Regents by Passed Subject Area
8. Scores on New York State Eighth Grade Math and ELA Tests

The School Snapshot includes the College Readiness Metric, represented as an aggregated pie chart, which allows principals and school leaders to quickly see the distribution of their students Off Track (red), Almost on Track to Graduate (yellow), On Track to Graduate (green), and On Track to College Readiness (blue) within their schools. Functionality within the DataCation platform allows administrators to measure progress on the College Readiness Metric across different semesters and drill down to specific students, helping

administrators determine not only who is off track but exactly why they are off track. The college readiness metric is also displayed as a histogram, enabling quick visual inspection of on-track status across different cohorts of students (see Figure 1).



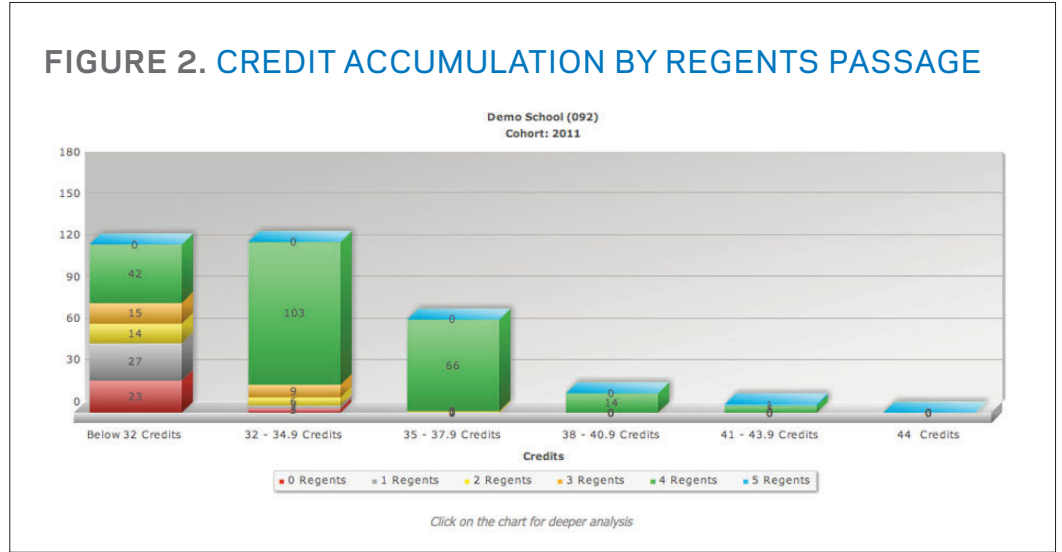
The College Readiness Metric:

- Off Track (red),
- Almost on Track to Graduate (yellow),
- On Track to Graduate (green),
- On Track to College Readiness (blue).

The key indicators within the College Readiness Metric, credit accumulation and Regents exam passage, are also presented in a cross-tabulated format, allowing school leaders to quickly differentiate student need (see Figure 2). Students who have passed five Regents exams but who have accumulated less than 30 credits have a different set of needs than the students who have accumulated 44 credits but who have not passed any of the Regents exams at 65 or higher. This type of real-time data on students' credit and Regents gaps allows school leaders to think through scheduling and programming strategies, as well as tutoring and course recovery or course acceleration interventions.

Attendance data and marking period data, other meaningful indicators of student progress, are also included in the School Snapshot. New Visions sets a high standard for school and student attendance, since attendance during freshman year is a strong predictor of course failure and, directly related to that, on-time high school graduation.¹⁷ The attendance chart in the School Snapshot categorizes students as On Track (green) if they are attending school 92 percent of the time; Almost on Track (yellow) if they are attending

¹⁷ Allensworth & Easton, 2005, 2007



school between 90 and 92 percent of the time; and Off Track (red) if they fall below 90 percent. School staff can view the attendance graph by grade level or by graduating class. In addition, staff can look at attendance across months by either grade level or graduating class.

Course grades in freshman year are also a critical indicator of long-term success in high school.¹⁸ Rather than waiting for a final grade, New Visions displays grades after each marking period by subject area in the School Snapshot. Identifying students who are not doing well after the first marking period allows schools to target students who are showing early signs of failure and to intervene earlier in the semester. Teachers and school leaders can visually see the percentage of students who are Off Track in English, math, science, and social studies. Students who are On Track (green) have received a marking period grade between 80 and 100. Students who are Almost on Track (yellow) have received a marking period grade between 65 and 79. Students who are Off Track (red) have scored below 65 on their marking period grade.

Ninth Grade and College Readiness Trackers

While school staff require quick access to aggregated school-level data, parents and students need student-specific information to gauge progress to graduation. However, complicated graduation requirements can be overwhelming for students and parents. According to Taveras et al. (2010), engaging parents in improving student achievement is difficult in the absence of appropriate information and tools that help assess their children's academic progress. Parents for whom English is not the first language may struggle the most to understand the official student transcript. New Visions created the Ninth Grade Tracker and the College Readiness Tracker to simplify complex graduation requirements and to provide parents with an easy-to-understand visual display of student progress over time.

Parents and students need student-specific information to gauge progress to graduation.

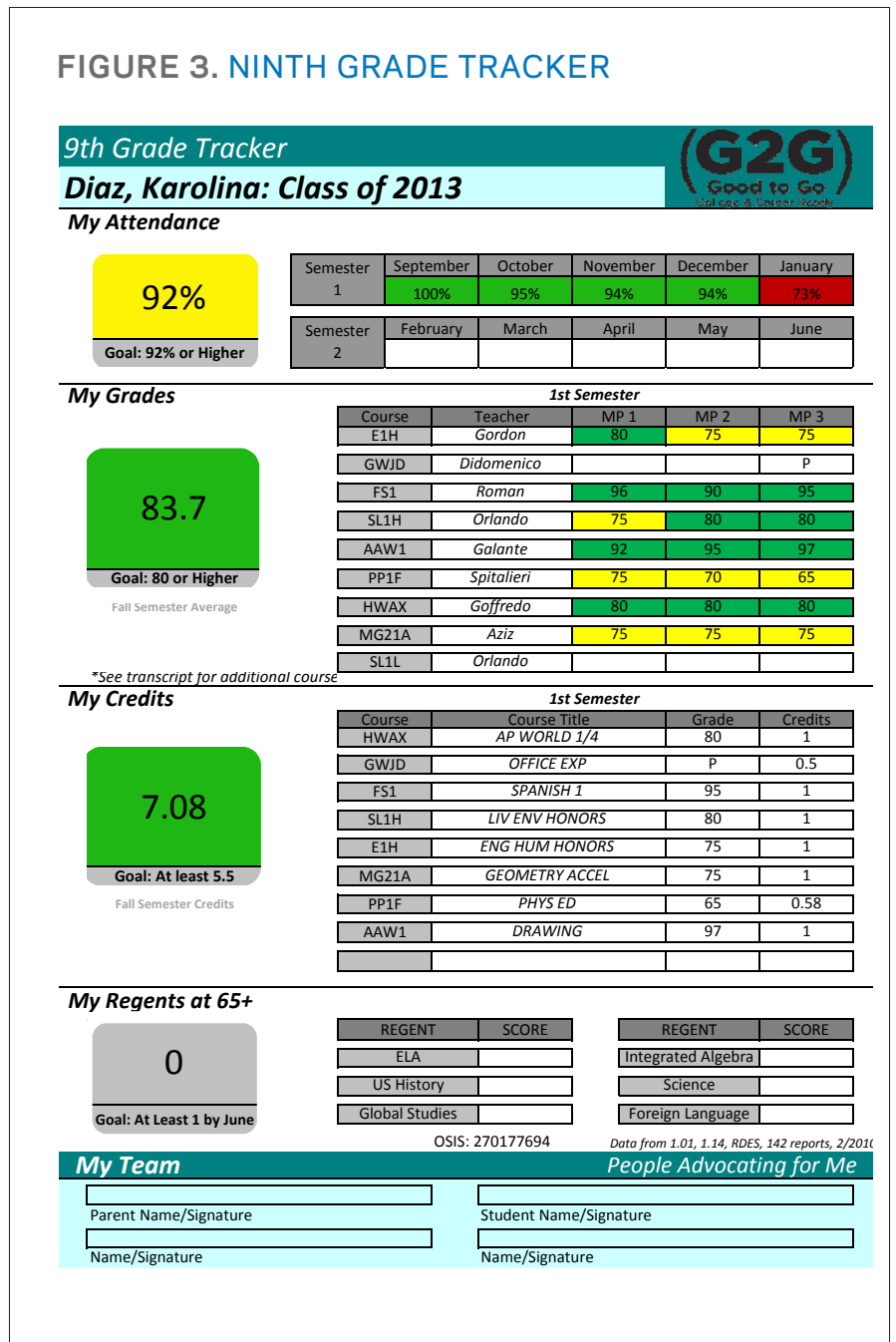
¹⁸ Allensworth & Easton, 2005, 2007

Ninth Grade Tracker

According to Neild et al. (2007), “ninth grade is a treacherous year” (p. 30). From the day freshmen start high school, it is critical that they understand the cumulative nature of their academic efforts as well as the specific requirements needed to graduate on time and college-ready. In NYC, the key benchmarks for college readiness, credits and Regents scores, are usually not applicable to freshmen until after their first semester. Drawing on work from CCSR that points to the importance of attendance and grades, New Visions developed the Ninth Grade Tracker to provide freshmen with a tool to monitor their progress after the first few weeks of school.

The Ninth Grade Tracker simplifies and graphically displays the key data points freshmen need to internalize. The first section of the tracker, “My Attendance,” displays average year-to-date attendance as well as monthly attendance. Colors are used to indicate On Track, Almost on Track, and Off Track status. The second section of the tracker, “My Grades,” displays a student’s overall marking period average and then presents marking period grades for the specific courses in which the student is enrolled. Students and parents can quickly identify course subject areas where the student is doing well and areas where he or she needs to improve. The third and fourth sections of the Ninth Grade Tracker present students and parents with updates on progress toward achieving the yearly 11 credits and Regents passage at a score of 65 or better. In this way, they help parents and students attend to graduation and college readiness requirements starting in the freshman year (see Figure 3).

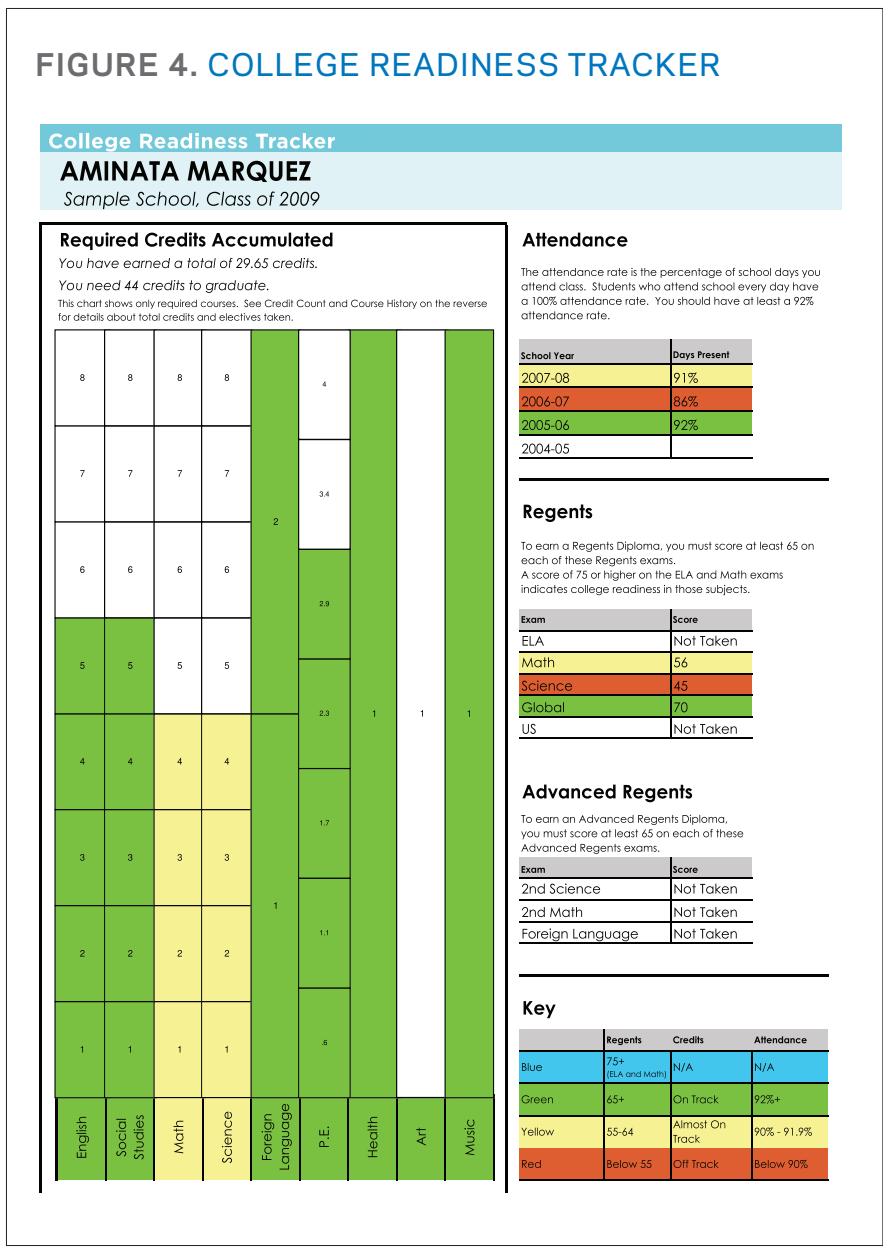
FIGURE 3. NINTH GRADE TRACKER



College Readiness Tracker

The College Readiness Tracker is typically introduced to students and parents after the freshman year and picks up where the Ninth Grade Tracker leaves off. The College Readiness Tracker provides an overview of a student's performance in Regents passage, credit accumulation, and attendance (see Figure 4). The color-coded bars on the left side of the page indicate whether a student is On Track, Almost on Track, or Off Track in credit accumulation in each core subject. A box is shaded in for every credit the student has accumulated toward the total credits necessary for that subject. The student's overall attendance history is displayed in the top right corner. On the right side of the page, the student's Regents status is shown for each of the core exams as well as the three Regents exams necessary for an advanced Regents diploma. The second page of the tracker provides a detailed course history for the student, including grades in each course taken during high school.


FIGURE 4. COLLEGE READINESS TRACKER



Using data to drive decision making requires that data be relevant for different school stakeholders. The Ninth Grade and College Readiness Trackers (designed for students and parents) and the School Snapshot (designed for school staff) are complementary tools sharing the same metric and color scheme. These tools facilitate a quick view of student need and create new opportunities for all members of the school community to become more knowledgeable and more deeply engaged in their students' education.

Real-Time Reporting, Drill-Down Functionality, and Grouping Functionality

The third key element in an early warning system for at-risk students is real-time reporting and functionality that allows movement along different levels of aggregation. Principals and school leaders often need school-level data, while teachers need department-level and student-level data to quickly develop school-, department-, and student-level interventions. Likewise, parents and students need up-to-date tracking information so that they, too, can set goals and plan interventions over the entire four years of high school and into post-secondary education. New Visions' trajectory of understanding the power of DataCation to impact school practice is similar to global business information trends identified by Gartner.¹⁹ Flexibility, ease of use, visualization, and overall information delivery are key drivers for organizations that are "rapidly embracing the data discovery value proposition of providing data to end users and empowering them with an ability to model, navigate, and visualize data."²⁰ Schools often need on-the-ground solutions that favor customization and innovation over the more traditional top-down IT approaches that give greater weight to standardization and "stacked centrality."²¹ Indeed, New Visions sees itself as part of the "consumerization" of data movement the Gartner report describes. In 2010, New Visions partnered with DataCation to integrate the School Snapshot, the Ninth Grade Tracker, and the College Readiness Tracker into an online, web-based environment that delivers real-time data to students, parents, and school staff and that allows schools to move from aggregated school-level reports to specific, data-rich student-level reports.



Principals and school leaders often need school-level data, while teachers need department-level and student-level data to quickly develop school-, department-, and student-level interventions.

Real-Time Reporting

It is a challenge for many schools to access student-level data and use it to quickly diagnose school-level progress. Too often, the existing data infrastructure in schools is inadequate for quickly accessing time-sensitive student progress data.²² Existing data systems are generally fragmented and require school staff to piece together data from different sources, analyze those data, and then organize an effective response.²³ Functionality underpinning the New Visions data tools within the DataCation platform integrates data from different NYC DOE data systems so that the School Snapshot, the Ninth Grade Tracker, and the College Readiness Tracker are always up to date and relevant. If changes to student information such as grades, exam scores, scheduling, and programming are made within the DOE data systems, schools can quickly sync their data within the DataCation platform so that those changes are immediately reflected in the New Visions data tools.

¹⁹ Sallam et al., 2011


²⁰ *ibid.*, p. 2

²¹ *ibid.*

²² Halverson et al., 2005; Lachat, 2001; Wayman, 2005; Tucker, 2010

²³ *ibid.*

Drill-Down Functionality



The availability of real-time data permits staff to monitor improvements or declines in student achievement and begin to identify patterns across time and within cohorts.

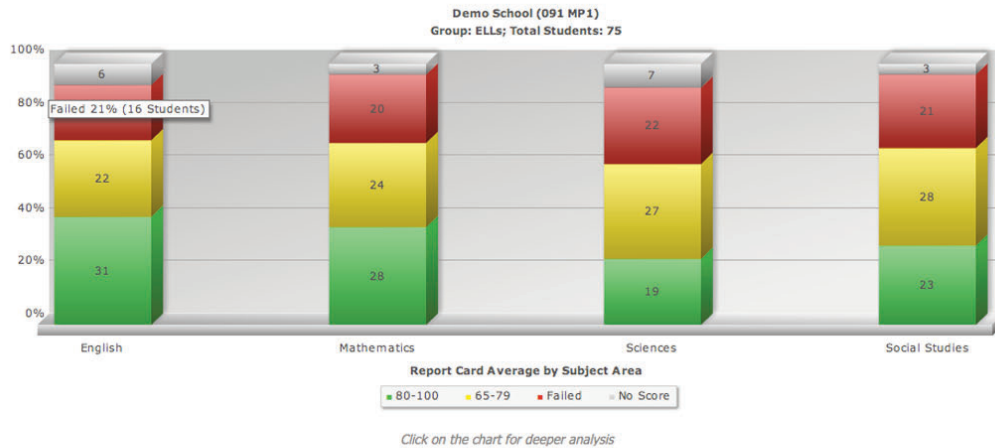
The ability to seamlessly move among different levels of data aggregation — from a macro school-view to a micro student-view — helps to ensure that the data are both accessible and relevant to school staff. For instance, a school principal may only be interested in the macro view of school marking period grades after marking period 1. He or she can use the School Snapshot to easily locate real-time data at the school level. On the other hand, a grade team might be interested in the students who have failed English at marking period 1 (see Figure 5). Functionality in DataCation allows these school staff to click on any graph within the School Snapshot and drill down to the individual students. With a single click, the grade team can generate a list of their target students (see Figure 5). Moreover, a teacher might be interested in more detailed information on the individual students. The graphs within the School Snapshot link to the DataCation platform, where teachers, administrators, and grade teams can quickly access student-level data in the form of a student profile — a data-rich page that integrates the services that the student is receiving, family contact information, attendance, schedule, report card grades, exam history, anecdotal logs, transcript data, and learning goals. The availability of real-time data permits staff to monitor improvements or setbacks in student achievement and begin to identify patterns across time and within cohorts. The ability to quickly disaggregate the School Snapshot to identify patterns of risk across the school helps staff distinguish between students who are at risk on one indicator versus students who are at risk on multiple indicators.

Grouping Functionality

Once at-risk students are identified, it becomes important to follow their progress over time. Teachers may want to track a specific group of students in their courses. Grade or department-level teams might want to follow a group of students within a grade or across grades. The grouping feature in DataCation allows school staff to organize students based on various interventions or needs and then monitor their progress by simply selecting that student group and viewing the relevant graphs within the School Snapshot. In this way, the grouping feature is critical for monitoring the effects of targeted interventions on groups of students.

Functionality within the DataCation platform permits school staff to customize their data reports while also facilitating fluid movement across different data views — from the school level to the student level. This flexibility encourages school staff to use data frequently and consistently.

FIGURE 5. AGGREGATE MARKING PERIOD AVERAGES BY SUBJECT AREA AND LIST OF STUDENTS WHO HAVE FAILED ENGLISH AT MARKING PERIOD 1.



Demo School 091 MP1 Grade: All Cohort: All Group: ELLs English Failed

School	Term	OSIS	Last Name	First Name	OFC	GL	Cohort	Subject Area	MP1 Avg	MP1 Range
00X000	091	562997406	Adams	Dennis	2BF	09		English	55	Failed
00X000	091	564569054	Brown	Ozie	1RS	10		English	0	Failed
00X000	091	563419004	Campos	Tim	0TS	10		English	62	Failed
00X000	091	565003723	Currie	Willie	1RS	10		English	0	Failed
00X000	091	503432166	Ives	Jackie	14S	10		English	55	Failed
00X000	091	509501188	Jacobs	Beulah	0BS	10		English	50	Failed
00X000	091	562809536	Mansfield	Philip	11S	10		English	60	Failed
00X000	091	508897678	Martini	Karen	3BF	09		English	60	Failed
00X000	091	503583695	Morse	Larry	3TF	09		English	60	Failed
00X000	091	555719528	Obrien	John	0TS	10		English	50	Failed

Conclusion

High school students, along with the parents, teachers, and administrators working with them, face countless challenges as they navigate the road to graduation and into a college or career. Access to updated, accurate, and useful information should not be one of these challenges. In the past, students have been surprised to find that they did not have the necessary requirements to graduate on time; now students in New Visions schools are familiarized with the requirements in their first semester and are updated on what requirements they have met, what requirements they still need to meet, and how they will fulfill these requirements during their four years.

Establishing clear benchmarks is the necessary first step. Without an understanding of where students should be, it is impossible to evaluate where they are. Benchmarks must be specific, clear, and correlated with the ultimate goals of college and career readiness. Otherwise, situations will arise where there are clear and specific benchmarks for promotion, but meeting these benchmarks does little to help students succeed.

Once benchmarks are established, the relevant data need to be synthesized, analyzed, and displayed in a way that takes the burden off the end-user, who is often someone without the time or inclination to engage in deep data analysis. Rather than requiring the user to sift through tables of numbers, a clear, color-coded visual display provides the right level of information and usability.

Finally, because student data change frequently within schools, the data must be accessible in real time. Administrators cannot make decisions based on data that are no longer accurate, and attempting to do so will be frustrating and may eventually dissuade them from making further data-based decisions. The need for accurate data is equally true for students and parents. All users need to be confident that the data they are viewing reflect the current standing of the credits, Regents, and attendance for each student.

While accurate and timely data are not the silver bullet to solve all of high schools' challenges, streamlining and refining the data analysis as described above allows teachers and administrators to focus less on the technical and administrative issues of schooling and more on what drew them to their profession in the first place: teaching and learning.

References

Admission Requirements. (n.d.). Retrieved March 14, 2011 from The City University of New York Website: <http://www.cuny.edu/academics/testing/cuny-assessment-tests/admissions-requirements.html>

Allensworth, E., & Easton, J.Q. (2005). The on-track indicator as a predictor of high school graduation. Chicago: Consortium on Chicago School Research.

Allensworth, E., & Easton, J.Q. (2007). What matters for staying on-track and graduating in Chicago Public High Schools: A close look at course grades, failures and attendance in the freshman year. Chicago: Consortium on Chicago School Research.

Balfanz, R., Herzog, L., & Mac Iver, D.J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: Early identification and effective interventions. *Educational Psychologist*, 42(4), 223-235.

Graduation Requirements (n.d.). Retrieved March 14, 2011, from New York City Department of Education Website: <http://schools.nyc.gov/RulesPolicies/GraduationRequirements/default.htm>.

Halverson, R., Grigg, J., Pritchett, R., & Thomas, C. (2005). The new instructional leadership: Creating data-driven instructional systems in schools. Paper presented at the Annual Meeting of the National Council of Professors of Educational Administration, July 2005, Washington, DC.

Jerald, C. (2006). Identifying potential dropouts: Key lessons for building an early warning data system. Washington, DC: Center for Public Education.

Lachat, M.A. (2001). Data-driven high school reform: The breaking ranks model. LAB at Brown University, The Education Alliance: Providence, RI.

Neild, R.C., Balfanz, R., & Herzog, L. (2007). An early warning system. *Educational Leadership*, 65(2), 28-33.

Parthenon Group. (2005). NYC secondary reform selected analysis. New York: New York Department of Education.

Pinkus, L. (2008). Using early-warning data to improve graduation rates: Closing cracks in the educational system. Policy Brief (August 2008). Washington, DC: Alliance for Excellent Education.

Sallam, R.L., Richardson, J., Hagerty, J., & Hostmann, B. (2011). Magic Quadrant for Business Intelligence Platforms. Retrieved March 21, 2011, from Gartner Website: <http://www.gartner.com/technology/media-products/reprints/tableau/vol2/article1/article1.html>.

Student Graduation Progress Tracker. (n.d.). Retrieved March 15, 2011, from Boston Plan for Excellence Website: <http://www.bpe.org/node/559>.

Taveras, B., Douwes, C., Johnson, K., Caspe, M., & Lee, D. (2010). *New Visions for Public Schools: Using Data to Engage Families*. Cambridge, MA: Harvard Family Research Project. Available at: <http://www.hfrp.org/NewVisions>.

Tucker, B. (2010). Putting data into practice: Lessons from New York City. Education Sector Reports, October 2011. Retrieved March 14, 2011, from <http://www.educationsector.org/publications/putting-data-practice>.

Wayman, J.C. (2005). Involving teachers in data-driven decision making: Using computer data systems to support teacher inquiry and reflection. *Journal of Education for Students Placed at Risk*, 10(3), 295-308.

Wayman, J.C., & Stringfield, S. (2003). Teacher-friendly options to improve teaching through student data analysis. Paper presented at the 10th annual meeting of the American Association for Teaching and Curriculum, October 4, 2003, Baltimore, MD.

Weiss, H.B., Lopez, M.E., & Stark, D.R. (2011). Breaking new ground: Data systems transform family engagement in education. Issue Brief (January 2011). Cambridge, MA: Harvard Family Research Project.

ABOUT NEW VISIONS FOR PUBLIC SCHOOLS

New Visions for Public Schools, founded in 1989, is dedicated to improving the quality of education children receive in New York City's public schools. Working with the public and private sectors, New Visions develops programs, solutions, and strategies to energize teaching and learning and to raise the level of student achievement. As a Partnership Support Organization (PSO), New Visions is accountable for improving student achievement in 77 New York City public schools, serving more than 38,000 students. As a charter network, New Visions is opening two charter schools, with plans for a network of 18 charter schools over the next few years. As a laboratory, New Visions is researching and developing novel solutions for schools, teachers, and students. The overarching goal is to graduate all students ready and successful for college, career, and life.



www.newvisions.org

New Visions for Public Schools ▪ 320 West 13th Street ▪ New York, NY 10014